

Report of the Stocktaking Work on the Economic Development in Africa and the Asian Growth Experience

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This report is an output of the “Stocktaking Work on the Economic Development in Africa and the Asian Growth Experience” conducted jointly by the Japan International Cooperation Agency (JICA) and the Japan Bank for International Cooperation (JBIC), with the aim of contributing to the discussion of acceleration of growth in Africa, which has been identified as one of the main pillars of TICAD IV, the Fourth Tokyo International Conference for African Development in Yokohama. The report is based on the discussion held in the advisory committee meetings organized for this exercise that met five times from June 2007, with participants from the Japanese academics specializing in African and Asian studies, the Ministry of Foreign Affairs of Japan, JICA and JBIC. The report is also informed by the discussion of an international workshop which was organized as part of the stocktaking work and attended by renowned researchers and practitioners from Africa and Asia in February 2008.

The authorship of this report rests solely with the secretariat of the stocktaking work who drafted the report with advice and comments from the advisory committee and thus the report does not necessarily reflect the official views and policies of JICA and JBIC.

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Executive Summary

Over the last several years most Sub-Saharan African economies have had a good opportunity to grow (hereinafter simply referred to as 'Africa'). Real GDP growth has steadily increased since 2000 and over the last few years an annual average rate of nearly 6% has been achieved. This growth has not been confined to resource rich countries. Except for the conflict or post-conflict countries, where rebuilding the economy remains obviously a major challenge, countries with limited natural resource endowments have also enjoyed an annual growth rate exceeding 5%. Setting aside the contribution of the commodity boom, at the heart of this growth lie the resolution of a number of protracted conflicts, sound macroeconomic management and the expansion of trade and investment opportunities that came along with an improvement of the investment climate.

However, for Africa to attain lasting poverty reduction without overly relying on aid, it is vital that its countries achieve sustained growth acceleration (SGA) through strengthening the foundations of their economies. In considering a new growth strategy for Africa to achieve this goal, the experience of Asian countries-which has already caught the continent's attention-offers a wealth of good practice and lessons learned to broaden the scope of policy options and thinking.

Growth in Asia was achieved through export-oriented industrialisation of the economy. In the background to this policy, there are a number of common elements, such as sustained periods of stable governance by development-oriented leaders, the development of agriculture ahead of that of industry, the accumulation of physical and human capital, and the high rates of savings. However, the actual strategy that a government adopted in a given situation-and the degree and nature of its involvement-differed significantly. One point to note is that whatever the degree of its intervention in the economy was, the governments in many of the Asian countries played an important role in fostering private sector activity.

Looking to the current situation in Africa it goes without saying that structural adjustment and globalisation, through narrowing the breadth of policy options available (policy space), have imposed a certain uniformity to the strategy that a country is able to adopt for economic growth and industrialisation. However, if a country is to advance industrial development in the context of an underdeveloped market and a weak private sector, it needs to adopt a proactive approach based on its own potential that is unique to the country's situation. In other words, it needs to formulate an 'Industrialisation Strategy', in close partnership with the private sector, which defines the direction of its long-term development and identifies the growth-leading industries (including agriculture, agro-processing and services) to be supported.

However, the intention of an industrialisation strategy advocated in this paper is not to allow the government to select unilaterally and arbitrarily where to intervene. Rather this paper advocates a closer dialogue and stronger partnership with the private sector. In this way, growth-leading industries can be 'discovered' and the necessary support measures adopted in a competitive environment, with the discipline on government actions and working within the scope of the country's institutional capacity. Implementing such a strategy in Africa should be based on full consideration of a national government's capacity as well as its political and economic constraints.

At a time when Africa is moving towards a real chance to break free of poverty, it behoves the international community to consider anew a strategy for growth in Africa and re-examine the policy instruments to be employed with a view to assisting the continent to achieve sustained and accelerated economic growth.

Policy Recommendations for African Countries:

- The adoption of industrial development policies, including trade and investment promotion (creation of special economic zones (SEZ) and support for SMMEs)
- The development of fundamental growth-driving functions (development of infrastructure and human resources as well as expanding reliable credit markets)
- Agricultural and rural development as the basis for industrialisation (productivity improvement of cereals, promotion of commercialised farming)
- The establishment of regional and extra-regional markets (provision of cross-border infrastructure, revision of the tariff system and capacity building for Regional Economic Communities (RECs))

Recommendations for Contributions by the International Community:

- Support for diverse strategies and policy measures to accelerate growth in Africa
- Improve market access for African products
- Promotion of Aid for Trade (A4T)
- Support for large-scale and cross-border infrastructure investments to build regional markets
- Promote the development of human resources through continued support for achieving the MDGs

Recommendations for Contributions by Japan:

- Support for the development of 'industrialization strategies' based on policy dialogue
- Support for the development of export products and marketing promotion
- Support for nurturing supporting industries (SMMEs) and industrial clusters
- Support to enhance S&T education, including ICT
- Support for infrastructure development (including cross-border infrastructure)
- Support for agricultural and rural development
- Improved market access for African products
- Support to the Japanese private sector to promote trade and investment in Africa

Main Text

1

The African Economy Today: The Need for Sustained Accelerated Growth

Over the last several years most African economies have had a good opportunity to grow (hereinafter simply referred to as 'Africa'). Real GDP growth has steadily increased since 2000 and over the last few years an annual average rate of nearly 6% has been achieved. (Table 1) This growth has not been confined to resource rich countries. Except for the conflict or post-conflict countries, where rebuilding the economy remains obviously a major challenge, countries with few natural resource endowments have also enjoyed an annual growth rate exceeding 5%. Setting aside the contribution of the

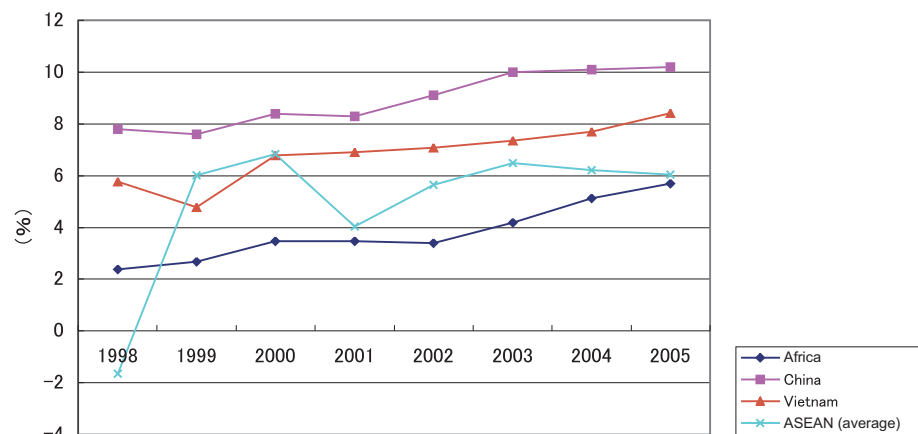
commodity boom, at the heart of this growth lie the resolution of a number of protracted conflicts, sound macroeconomic management and the expansion of trade and investment opportunities that came along with an improvement of the investment climate.

Nevertheless, economic development in African presents cause for concern as well as optimism.

In Africa:

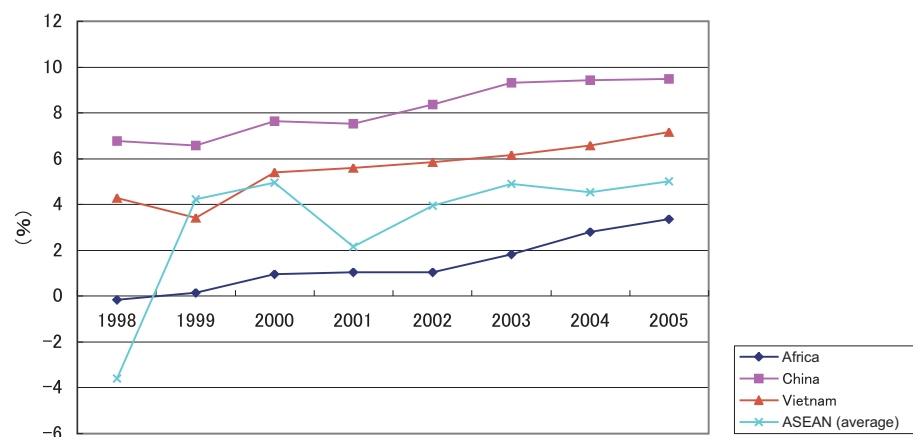
- (1) economic growth is far from adequate on a per capita basis. The per capita GDP growth rate is

● Table 1 Trend of GDP Growth Ratio for Africa and Some Asian Countries



Source: World Bank, World Development Indicators (various years)

● Table 2 Trend of Per Capita GDP Growth Ratio for Africa and Some Asian Countries



Source: World Bank, World Development Indicators (various years)

in the order of 2% (the average taken over 2000 to 2005), falling well below the average GDP growth rates; (**Table 2**)

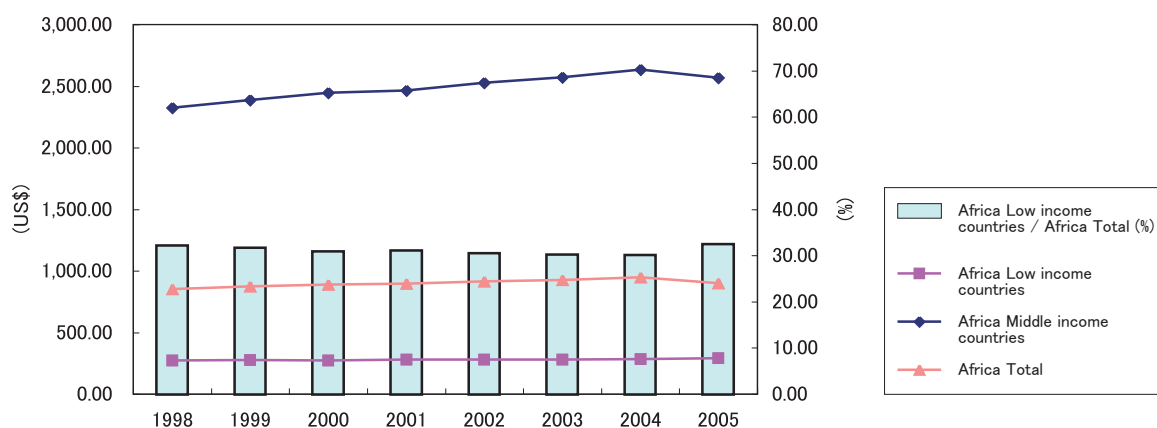
- (2) growth is not uniform among countries. Real per capita GDP in low-income countries remains one third of the average for the continent as a whole; (**Table 3**) and
- (3) for real per capita GDP to reach that of present-day Thailand or Malaysia within the next 20 years, per capita GDP would have to grow in the order of 7.8% (Thailand) to 9% (Malaysia) on an annual basis, that is, a GDP growth rate of at least 11% per annum.

Economic growth is expected to help reduce poverty that plagues Africa via expanding employment. Clearly, for each country in Africa to overcome economic challenges including poverty reduction, **it needs not only to sustain its current level of growth, but to accelerate it.** In other words, it requires **‘Sustained Growth Acceleration (SGA)’**. Just as signs of growth are now visible in

Africa, and the continent is moving towards a real chance to break free of poverty, it is vital that African countries address the issue of growth from the long-term perspective.

Recent international debate over development in Africa has focused on the importance of the growth agenda, as can be seen in the work of Hausmann, Rodrik and Velasco who are proponents of ‘Growth Diagnostics’, or the work of Spence and others for ‘the Commission on Growth and Development’. As well as seeking new measures to accelerate economic growth in Africa, the international community needs to explore a more holistic approach to assistance, one that would include aid, trade and investment. Moreover, the Asian experience of development, i.e. the successes and setbacks of the Asian countries such as Japan, the NIES, ASEAN members, China and India, offers a wealth of good practice and lessons learnt to broaden the scope of policy options and thinking for growth in Africa.

Table 3 Per Capita Real GDP (constant 2000) of African Countries and Share of Low Income Countries



Source: World Bank, World Development Indicators (various years)

2

Key Factors in Achieving ‘Sustained Growth Acceleration’ (SGA): Drawing on East Asian Experience

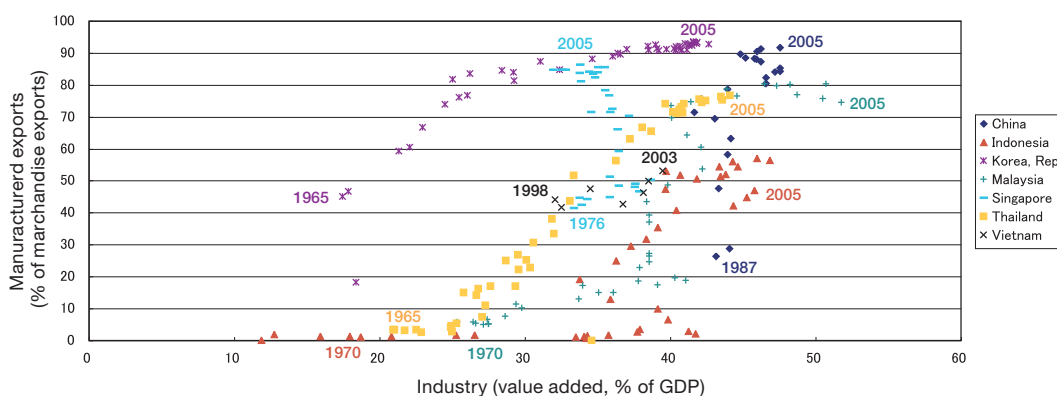
2.1

The Asian Experience

According to Simon Johnson and others at the IMF, of the twelve countries worldwide that have succeeded in sustaining high, long-term economic growth since 1960, eight are Asian. On their path to attaining SGA, these Asian countries shared a virtuous cycle of employment expansion and growth. A number of factors contributed to the creation of this cycle: The education of girls and increased use of family planning brought about a lowered birthrate, and this, along with a boost in the work-age population (the demographic dividend) absorbed by labour-intensive industries, was linked to an increased savings rate through employment and an accumulation of capital that satisfied domestic investment needs. **(APPENDIX 1-1)** The central policy in this process was an **‘export-oriented industrialisation’** that sought markets and technologies overseas **(Table 4)**, and **Asian governments, in pursuing this policy, played an important role in supporting ‘long-term economic growth**, as can be seen from the following examples:

- (a) Many countries from the Far East through to Southeast Asia underwent industrialisation under development-oriented governments that had leaders with good understanding of economic-policies at the helm, and capable administrations that maintained long periods of stable governance, lasting between 15 and 20 years. Over time, public economic institutions that had been weak at the outset, especially those related to contract enforcement and protection of private property, gradually improved through the process. **(APPENDIX 1-2)**
- (b) Asian countries, especially those in Southeast Asia, promoted agricultural and rural development - the ‘Green Revolution’ - before they began the process of industrialisation. From the end of the 1960s, in just a single decade, the introduction of high-yield rice and other primary crops, subsidies for fertilisers and

● **Table 4 Export-Oriented Industrialisation in Asian Countries**



Source: World Bank, World Development Indicators (various years)

other agricultural inputs and the expansion of investment in irrigation allowed the improvement of agricultural productivity, **(APPENDIX 1-3)** and increased food production enormously. The resulting fall in the price of cereal crops contributed to improvements in the economic welfare for the urban workers. In addition, improvements in agricultural efficiency allowed excess rural workers to move to urban areas, which in turn further drove industrialisation and the expansion of employment. In the Far Eastern countries of Japan, South Korea and Taiwan, the leveling of incomes through land reform not only helped with social policies but also played an important role in accumulating capital for industrialisation.

(c) Asian countries controlled inflation at an adequate level and stabilised the macroeconomy through the use of several policies, including keeping the real interest rate positive, which contributed to high savings rates and reduced the risk of owning financial asset. Furthermore, industrialisation and job expansion in the industrial sector also led to a rise in the national savings rate. The high savings rate enabled domestic capital accumulation, which through state capital mobilisation was channeled into investment in industry. This mechanism accelerated total investment and economic growth in East Asian countries.

(APPENDIX 1-4)

(d) In terms of capital formation, Asian governments attached great importance to the allocation of budget to primary and secondary education, including that of girls. This generous investment in education created high-quality human capital for the industrialisation process. Furthermore, the spread of education, coupled with the family planning policy, led to a lowering birth rate and the creation of a 'demographic dividend'. **(APPENDIX 1-5)** Meanwhile investment to develop physical infrastructure, including that for transport and electrification, which also

served as the foundation for industrialisation, was also actively supported by governments, with the support of ODA funding from Japan. Infrastructure development supported by Japan included those intended to improve the country's access to overseas markets by strengthening transport linkage among urban centres, industrial parks and export ports, as well as those meant for reinforcing domestic industrial networks.

In addition to the abovementioned characteristics, several other factors enabled export-led growth:

(a) The existence of large and expanding export markets such as those of Japan and the United States, which also served as the main sources of direct investment and technological transfer, was an essential component of the Flying Geese development pattern. Regional economic networks that developed over the course of Asian history provided the backdrop for active trade and investment between each country during the economic growth period.

(APPENDIX 1-6)

(b) The strategic shift of industrialisation policy in stages, from the import substitution of light industrial products (1st import-substitution) to export orientation (1st export-orientation), followed by a further shift to heavy industry (the 2nd import-substitution) and finally the exporting its products (or the 2nd export-orientation). Here, trade liberalisation was not immediate, but was a gradual process that took place in line with the domestic capacity for growth. **(APPENDIX 1-7)**

(c) The maintenance of a low inflation rate through stable economic management coupled with government control and management of the exchange rate at a competitive level in order to facilitate export. **(APPENDIX 1-8)**

2.2.

Diversity of Industrial Development Strategies and Experiences in Asia

While sharing these commonalities, the Asian experience of industrialisation also exhibits substantial diversity depending on time and place. Each country adopted an industrialisation strategy tailored to the economic environment at the time and corresponding to its own comparative advantage.

This diversity exhibits the following dimensions:

<Diversity among Countries>

- (a) A 'domestic-capital-dependent' approach adopted by countries such as South Korea, Taiwan and Japan versus the 'foreign-capital dependent' approach taken by Singapore, Malaysia, Thailand, the Philippines and Indonesia. (**APPENDIX 1-9**)
- (b) Natural resource-rich countries such as Indonesia, Malaysia and China versus natural resource-poor countries such as Singapore, Thailand, South Korea, Taiwan and Japan.
- (c) The interventionism of South Korea (until 1980s), Singapore, Indonesia (until 1990s), Malaysia and the Philippines (until the mid-1980s; however, political intervention in the Philippines seriously hindered the efficient distribution of economic resources) versus the liberalism of Taiwan (since 1980s) and Thailand.

<Diversity among Generations and Other Dimensions>

- (a) A shift in policy orientation over time characterised by (i) a shift from import substitution to export orientation, where the Newly Industrialized Economies (NIEs), excluding Hong Kong, shifted in the 1960s and ASEAN-member countries shifted later during the 1970s and 1980s, (ii) the response to globalisation, the implementation of the IMF package to overcome economic and currency crises, the adaptation to the WTO system, the formulation of Free Trade Agreements (FTA), the development of a domestic safety nets and dealing with the climate change problems.

- (b) The diversity in 'leading' industries spanned the breath of heavy industry, consumer electronics, agro-processing, textiles and garments and information and communication technology (ICT). Generally speaking, relatively competitive industries shifted from labour-intensive industries such as textiles and garments to ones that were either capital or technology intensive, or both. Examples include heavy industry, machinery and consumer electronics. This shift was propagated from Japan to the NIEs, then from the NIEs to ASEAN-member countries, and came to be known as the development in a 'Flying Geese Formation'. This take-off pattern of development has now given way, for the most part, to a system in which manufacturing processes are dispersed among several competitive countries, thus further diversifying leading industries.

2.3.

Case Studies of Asian Industrial Development

In relation to the abovementioned individual strategies, this section looks at a number of case studies of economic growth in Asia and the lessons learnt from their experience. The studies are grouped into three categories: 'Natural Resource-Rich' and 'Natural Resource-Poor' countries and 'Developing a New Comparative Advantage'. (See **APPENDIX-2** for details in each case.)

A. Development Strategies of Natural Resource-Rich Countries

Management of Resource Curse: Indonesia

<Experience>

- The Government of Indonesia (Gol) employed the 'balanced-budget principle' approach, which included overseas borrowing and keeping government financial politics and overseas borrowing relatively steady from the 1970s until the early 1980s. Yet, the government sharply devaluated the exchange rate despite the rapid growth in export income in 1978. This was in response to the concerns that the fixed exchange rate that had been held for previous six years had kept the real exchange rate high while raising the inflationary pressure and undermining the competition of the non-petroleum sector, i.e. the tradable-goods sectors such as manufacturing and agriculture. To improve the situation further, the Gol also enhanced productivity and supply capacity by allocating much of its petroleum revenue to the tradable-goods sector, which was susceptible to Dutch disease, to maintain and expand export.

<Lessons learned>

- An effective macroeconomic stabilisation policy, including a timely exchange rate policy, is crucial for economic stability and development.
- The Gol evaded the Dutch disease by allocating petroleum revenue to enhance the productivity and supply capacity of the tradable-goods sector.

Using Revenue Generated through Oil and Mineral Resources for Agricultural and Rural Development: Indonesia

<Experience>

- While increased oil and natural gas production were used by the government in many ways to support economic development during the 1970s and the early 1980s, the government also promoted agricultural and rural development through the transfer of resources from the natural resources sector.

From the early 1960s, the Gol repeatedly adopted programmes to increase food production under the policy to achieve self-sufficiency. By promoting agricultural and rural development through the transfer of the abundant earnings from oil and natural gas, the country was able to drastically improve rice productivity and to bring about the Green Revolution. And by the early 1980s, the country achieved self-sufficiency in rice and also succeeded in forming the foundation the long-term economic growth through stable food supply to cities and the industrial sector as well as capital accumulation in rural areas. In addition to the development and distribution of improved varieties, the lowering of fertiliser prices through subsidies on chemical fertilisers and massive investments in irrigation facilities – all of which were important agricultural production assistance policies -- the Gol adopted a further range of agricultural assistance measures, including agricultural credits and support for rice producers. These investments were possible because Indonesia was able to use its oil and natural gas reserves to produce the chemical fertiliser and also generate abundant revenue for investment

<Lessons learned>

- The importance of agricultural and rural development, based on oil and mineral resources, as a foundation for long-term economic growth.
- The importance of using a combination of high yield seeds, fertilisers and irrigation development

to improve agricultural productivity, while at the same time offering a combination of demand-side prop measures, including producer-price support.

Breakaway from Mineral Resources Dependent Economy: Malaysia

<Experience>

- The Malaysian economy was still reliant on primary product exports such as crude oil and natural rubber into the beginning of the 1980s. Yet, the ‘Industrialisation Master Plan’ (IMP) advised a departure from the country’s dependency on the export of primary products by means of export-oriented industrialisation. So under the IMP, the government started promoting industrialisation through the active use of foreign exchange. First, it selected 12 priority products and product groups according to a number of criteria, including the latent comparative advantage, the product (or product group’s) benefit to the national citizens and export-orientation. Second, the policy identified constraints or problems for each product or product group and proposed incentive measures to overcome them. Third, it announced measures to attract foreign investment and deregulate. And, finally it removed barriers to private investment that originated from the New Economic Policy (NEP), and recommended an easing of regulations through a law on industrial adjustment. This process coincided with investment by Japanese firms, which also started in the mid-1980s, and allowed the Malaysian economy to accomplish rapid economic growth through export-oriented industrialisation. Furthermore, the government took initiative in developing the domestic supporting industry through building an alliance among foreign-affiliated firms, mid-to-small -sized firms and financial institutions.

<Lessons learned>

- Clear government policies were key in diversifying the economic structure through export-oriented industrialisation.
- The importance of assigning priority sectors through a set of clear criteria coupled with the deregulation of private sector activity.

- The government’s role in strengthening the linkage between foreign-affiliated firms and small domestic firms proved critical.

B. Development Strategies of Natural Resource-Poor Countries

Promotion of Commercial Agriculture (including Agro-industry): Thailand

<Experience>

- Traditionally an exporter of rice and natural rubber, in the latter half of the 1980s, Thailand succeeded in increasing the degree of processing or ‘value added’ of primary commodities for export under an industrialisation strategy which led to it being referred to as a ‘Newly Agro-industrialising Country’. Specifically, it adopted modern quality control and production processes for canning and processed food production from Japan and used the country’s abundant supply of labour to diversify and expand the labour-intensive processing of products. Particular government measures included the abolition of the long-standing tax on rice, known as the ‘rice premium’, which increased incentives for the private sector to enter agribusiness. The success of the strategy was reinforced by private sector factors such as (a) a high degree of adaptability to transition on the part of farmers, (b) the technical guidance provided through middlemen and (c) the rise of agribusiness groups.

<Lessons learned>

- The value addition of agricultural products through processing can play an important role as the basis to form leading industries for economic growth.
- The importance of harnessing private-sector dynamism and eliminating any bottlenecks to its development.

Investment through Public Development

Banking in East Asia: Japan and South Korea

<Experience>

- In Far East Asia, public development banking facilities that supplemented the role of private financial institutions were founded at an early stage of development: in Japan in the 1950s and

in South Korea in the 1960s. These public banking facilities offered low-interest loans to strategic industries and offset various limitations, in terms of risk management, screening, monitoring and short-term loans, of the private banking sector within a maturing financial market. In Japan public development banking was positioned to provide a system whereby the government could intervene in fund allocation when needed during the post-war reconstruction period, and this greatly contributed to the development of strategic industries.

However, as economy developed, the growing capability of private financial institutions reduced the role of public institutions.

- Meanwhile, the financial system in South Korea, long kept under the government regulation, created a dual structure of low-interest public finance and high-interest private finance as the norm. While chaebol big businesses and strategic industries were entitled to public loans, other industries and small businesses were left without fund accommodation and were forced to use high-interest, private financing. Moreover, market economy failure and deliberate fund allocation spawned collusion between the government and the industries.

<Lessons learned>

- Low interest financing provided through public development banking proved critical for industrial development in an underdeveloped private financing market.
- Prolonged government intervention proved counterproductive creating a dual financial structure with a funding supply bias and collusion between the government and industry formed in the process.

C. Developing a New Comparative Advantage

The Development of the ICT Industry through

Higher Education: India

<Experience>

- The main reasons for India's success in producing highly-quality IT engineers lies in (1) the use of English as an official language in the South, which facilitated the industry's participation in the

international arena and (2) the multitude of science and technology further education and research institutes of an international standard.

- From the 1970s, with a view to promoting economic growth, the federal government began adopting measures to support the development of the IT industry including the establishment of the Department of Electronics (currently the Ministry of Communications and Information Technology). Its role was to develop the software industry and establish software development as a public work. In 1984, the government also adopted preferential policies such as the liberalisation of the software industry to enable entry by private enterprises and to reduce import tariffs on hardware and software products.
- In addition, India places an emphasis on the development of human resources for the IT industry, and has focused efforts on strengthening IT capacity in the education sector through making computers available in schools and spreading IT training.

<Lessons learned>

- Clear government strategy and resource allocation, including investments in science and technology and IT education, led to the establishment of an IT nation.
- Co-operation between industry and research and education institutes assisted in spreading IT and developing the appropriate human resources for it.

Investment Climate Development through the Establishment of Special Economic Zones: China, Thailand and the Philippines

<Experience>

- Special Economic Zones have been criticised for their limited impact on domestic industries, aggravating an already distorted domestic economic system and the compliance issues they engender with the WTO rules (SCM Agreement). In examining cases from Asia, however, one can clearly see the positive impact that Special Economic Zones have had on a country's economic growth. In the case of China, they have

played the role of a testing ground for domestic economic institutional reform. Meanwhile, in Thailand, they have led to the creation of an industrial zone through a comprehensive approach that included infrastructure development by the government and donors..

- With support from Japan and the World Bank from the 1980s to the 1990s, the Thai government undertook the Eastern Seaboard Development Plan. This large-scale industrial zone development, which included infrastructure, enabled both a synergistic link among production industries and product shipment, permitting the machine industry, which ranged from multinational firms to small-scale vendors, to act as the foundation of an aggregate export base.
- Meanwhile starting with a large-scale, export processing district built in Bataan in central Luzon in 1969, the Philippine government built four export processing districts by the mid-1980s. However, their achievements failed to meet initial expectations due to inadequate investment climate and inefficient management by public institutions. Thereafter, as the private sector took initiative in a public-private co-management system, export processing districts started attracting investment.

<Lessons learned>

- The benefits of using of special economic zones as a testing ground for investment climate development.
- The benefits of a comprehensive approach towards concentrated infrastructure development, information, institutions and human resource development aspects at the initial stages.
- The importance of actively engaging private-sector capability in managing special economic zones.

Strategic Human Resource Development and Support for Overseas Employment:

The Philippines

<Experience>

- While the Philippines remains a in trade deficit, this has been offset by remittances transferred by overseas workers. These transfers have not only maintained a current account surplus for the

nation since 2003 but have boosted the domestic consumption which has underpinned recent growth of the Philippine economy.

- In light of this, the Philippine government has actively pursued a major strategy to encourage overseas employment. Through the foundation of the Philippine Overseas Employment Administration (POEA) in 1982 and negotiation of bilateral agreements, it has provided oversight, support and protection for both potential employers and employees. Nurses, in particular, command high salaries abroad because of their English ability and the American-style training that they receive. To make full use of this advantage, the government has facilitated the expansion of medical and nursing schools while also collaborating on caretaker-training programs with countries that welcome Philippine health workers.

<Lessons learned>

- Recognition of remittances as an important source of capital inflow.
- Identification and fostering of marketable human resources has served as a comparative advantage, in this case English speakers trained in an education system compatible with that in the Western countries.
- Specialised and skilled labour that is in demand overseas was strategically promoted.
- The formation of a development strategy was unconstrained by geographical conditions, at least in the short to mid term.

Establishment of a Development Corridor :

Mekong Basin Development

<Experience>

- The Greater Mekong Sub-region (GMS) Development Programme is designed to activate inter-region trade, including that with land-locked Laos, through the expansion of the investment market by developing regional transport infrastructure, which will include the construction of both east-west and south-north corridors, and creating a power network.
- The GMS Programme was not initiated through a multilateral co-operation agreement. Rather, it

began as a results-oriented bilateral agreement, where co-operation concentrated in feasible areas. This framework was then gradually expanded to other countries. The role of the Asian Development Bank (ADB), which acts as the secretariat, was also important to the success as it provided finance to the GMS and supported it in the areas of planning and the co-ordination of project execution.

<Lessons learned>

- The need for public-private partnership and an emphasis on a realistic approaches in the development of a developmental corridor.
- Overall co-ordination, technical assistance and project finance provided by regional development financial institutions proved vital.

As seen from the cases above, the decisive factor in the Asian experience of economic growth was **the mid- to long-term vision for development and the strategies that development-oriented governments used to guide the private sector.** Of course, the measures themselves, as well as the degree and success of the interventions in private sector, varied according to country and time. Yet, a factor common to all instances is that **the government remained flexible in responding to a changing environment, reexamining its vision and strategies when needed.** At the same time, the foundation for self-reliant development can be said to have been formed through **the governments' maintaining close ties with the private sector and harnessing the private sector's capacity to the maximum.**

3

Development Strategies for Africa to Achieve Sustained Growth Acceleration (SGA)

3.1

Expansion of Policy Space: Through ‘Industrialisation Strategy’

Since the 1980s, phenomena of globalisation, such as significant reductions in telecommunications and transport costs, have provided new opportunities worldwide, including ones for the developing countries. Following ASEAN countries, a number of developing economies, notably China and India, have taken advantage of these opportunities and achieved remarkable growth in recent years. However, as mentioned earlier, the growth paths taken by Asian economies reflect their own particular socio-economic conditions, and while the role played by each government was significant, its policy measures also varied.

Looking at the cases in Africa, the role of governments is virtually limited. **Approaches to industrial development have become more or less uniform, relying heavily on the private sector (particularly foreign capitals), notwithstanding its weakness within an underdeveloped market.** The ‘policy space’ discourse of recent years indicates that in a globalising world economy, the rules and norms of international economic regimes (e.g. liberalisation of trade and finance and market reform), have narrowed the policy options for “regime takers”, i.e. the governments of developing countries – specifically, in areas of trade, macroeconomic management, and industrial development.

The rules and norms in themselves - e.g. market-friendly policies and improvement of various governance indicators – are legitimate. The WTO also stipulates the Special and Differential Treatment for developing countries. According to this, African countries should have had diverse growth strategies

reflecting each economy’s conditions with prioritised and sequenced policy measures, as it has been the case with Asia. In practice, however, along with the constraints in government capability and finance, African countries have been required to meet the uniform standards (so called ‘best practices’) with little consideration made for particular socio-economic situations. Under these conditions, they are hindered from designing unique policies or institutions at their discretion, or enhancing their capacities through a process of trial-and-error. As a result, strategies of economic growth and industrial development in most African countries are actually standardised.

African countries have made efforts to rectify macroeconomic imbalances through structural adjustment and stabilisation in the 1980s, and pursued reforms in governance and institutions in the subsequent decade too. Such efforts to realise macroeconomic and political stability and market reforms, have not necessarily borne fruit when it comes to promoting new industries or development. Part of this is accounted for by the insufficiency of reforms and by the uncertainties relating to the civil wars in the post-Cold War Africa and their negative effects on neighboring countries, indeed. But even resolving such problems, the current low levels of infrastructure and other capital stock, the disparity between the productivity and wages of human resources, the costs associated with public administration, and the lack of efficient financial systems, have all conspired to reduce business profitability in Africa, and so place limits on economic growth.

Given these conditions, for Africa to realise sustained growth acceleration through promoting industries, redressing inadequately distributed production factors and transforming the rigid economic structures, it appears that expansion of the range of policy measures adopted by the governments will be necessary, in support of the private sector's role as the primary actor in economic growth. In other words, **while compliance with present international economic regimes is maintained, we suggest that the governments pursue 'industrialisation strategies' that seek to identify and support prospective leading industries with a focus on latent potentialities of individual economies.**

This proposal's position in calling for an 'Industrialisation Strategy' is as follows:

First, we recognise that **consideration must be given to the uniqueness of individual economies and their (sub-) sectors.** For instance, constraints on growth vary: it needs to be determined whether the root problem is low return on investment or high costs of access to capital, as each of these problems calls for different prescriptions. There is no single measure fitting to all economies to improve business environment. It is necessary to consider the unique conditions each economy and sector face to identify the individual constraining factors and thereby to adopt appropriate measures.

Second, we believe that **market interventions by governments at a level appropriate for one's institutional capacities can be justified to address market failures.** Even developed countries do not hesitate to co-ordinate information on specific sectors, to subsidise research and development, or to provide incentives to targeted sectors. Given the weakness of private sector and the lack of competitiveness seen in Africa, governments' active involvement in identifying and prioritising the development of leading industries seems to be justified to achieve accelerating economic growth.

Third, we recognise **the importance of identifying future economic structures under a long-term vision of growth and the appropriate selection of pathways towards these goals.**

When investment and financing are left entirely to the private sector, it is unlikely that industrial upgrade takes place in underdeveloped markets. Rather, a gradual shift to low value-added industries with a diminishing scale and/or redundant investments in limited number of sub-sectors is anticipated. With the achievement of sustained growth acceleration in mind, governments ought to work to develop those economic structures and development pathways that are capable of leading to long-term economic growth and poverty reduction by establishing close partnership with foreign and domestic private sectors, and thereby giving clear signals for desirable investment.

3.2

The Key Points of an ‘Industrialisation Strategy’

The ‘Industrialisation Strategy’ we recommend is one that aims to articulate a vision of future economic and industrial development and to provide the supporting policy environment to the domestic and foreign private sector. To achieve this, a country ought first to identify the constraints to pursue its growth strategy and development of growth-leading industries, with reference to the country’s potential (both latent and overt), the outlook for its socio-economic and industrial structure in the mid- to long term vis-à-vis international economic environment. Based on this, it should present a set of specific and realistic policies in trade, FDI attraction, finance and public investment, among others, to address the constraints.

In the following section, we present key factors for consideration with regard to the role of the government in establishing and implementing these policies, with full recognition of various issues often linked to what is commonly referred to as ‘industrial policy’, such as selective intervention, institutional capacity, protectionist policies and rent-seeking activities.

3.2.1

‘Discovery’ of Growth-Leading Industries Based on Lucid and Transparent Criteria

One of the most controversial issues in Industrialisation Strategy is the identification of leading industries. Yet, we stress that the term ‘industrialisation’ here refers not only to manufacturing sectors, for example, but to a broader range that includes agriculture and service industries as well.

The process of identification here is **not intended to mean the sole and arbitrary ‘appointment’ (i.e. picking up) of sub-sectors or particular enterprises for nurturing by a government.** Which sectors are capable of leading an economy is frequently decided by historical or geographical

accident. The past experience of industrial policies also illustrate that industries selected by governments have not always succeeded. Rather, as described below, it is more realistic to support ideas formed by public-private fora, or to assist promising sectors that show initial signs of ‘prospectively’ leading an economy (and with potential for export). What is crucial is that **the identification be done through the process of ‘discovery’ and criteria for selection** – e.g. the level of productivity increase – **be made transparent to all stakeholders.**

3.2.2

Information Sharing Through Public-Private Partnerships

It is not always possible for governments to correctly predict successful industries or sub-sectors by foreseeing dynamic comparative advantage. Rather it is the domestic and foreign private sector which understands the realities of production and markets well, that is better suited to address information asymmetries and to make sense of cumulated data. The government’s role, on the other hand, is to provide information on regulations and international rules relating to business, as well as data on macroeconomic conditions. In East Asia in the 1980s, **permanent public-private fora to share information were often established by specific issues or sub-region.** In order to realise the ideas brought up by such fora, governments would enact appropriate reforms to make institutions more business-friendly, and provide credit when necessary. The government (or a forum itself) could serve as an entry point for donor support or information from foreign investors regarding international market trends, financing and advice on identifying industries. Meanwhile it could disseminate the knowledge and expertise necessary for industrial development. It is equally **important to determine the constantly evolving issues that confront industries and work to resolve them** through these processes – which then lead to an improvement of country-wide institutional capacity.

3.2.3

Developing Industries with Discipline and Competition

The following considerations are crucial for governments to effectively and efficiently support the development of new industries.

First, in order to promote private sector activity, a government has an invariable role as a facilitator to maintain an enabling environment, including the provision of both 'hard' and 'soft' infrastructure.

Second, as the government's more active roles include; (1) investing in research and development; (2) providing fiscal incentives such as tax deductions, subsidies and low-interest public loans; and (3) helping to attract individual direct investment. There is, of course, the risk that such activities may distort the efficient allocation of resources, as well as the concern that, once preferential measures have been enacted, they may become vested interests and hamper subsequent increases in competitiveness. It is therefore **critical to establish an effective system which enables a government to design policy measures with clear criteria and goals as well as a specified scope and duration of the measures, to regularly monitor, and to allow trial-and-error experiments.**

Third, in order to mobilise the limited resources and promote industries which contribute to sustainable growth in Africa, it is vital **to check collusion between government and private enterprises and rent-seeking activities by introducing competitive pressures and effective regulatory arrangements** as well. And, as competition is the critical vehicle for the sophistication of business operations, the creation of competitive environments itself could be regarded as a 'government support' for industrial development.

3.2.4

Adopting Measures Depending on the Institutional Capacity

The extent of governmental intervention in industrial development should be based on the country's level of institutional capacity. Countries with a low level of capacity at present should begin with neutral measures (i.e. non-sector-specific) - these measures include; establishing an enabling environment, such as providing infrastructure, enhancing market functions, improving the civil service, providing information, streamlining standards, facilitating technological development, supporting small and medium enterprises and promoting export. For countries with solid institutional capacities with autonomous bureaucracy (or those countries who see increased capacities through trial-and-error efforts and reforms), more selective interventions could be maneuvered through the formulation and implementation of timely and appropriate policies endorsed by public-private networks.

In the African context, **private sector capacity and its relation with government** require attention. In many countries, domestic private sector has limited capacities and are confronted with constraints. Meanwhile in many countries there exists a less than warm relationship between the public and the private sectors. Key to improving the situation is to promote the development of a 'win-win' relationship, where the government supports human resource development and shares information for the private sector. The institutional capacity can be improved, not static. It is vital for African countries to select appropriate measures for industrial development commensurate with their institutional capacities and to pursue the potential for capacity strengthening through a process of trial-and-error.

4 Policy Recommendations under an Industrialisation Strategy

In the following section, we outline a menu of policy recommendations and matters to be considered under the Industrialisation Strategy described in section 3.2 above. We do not, of course, suggest that these policies be attempted in a uniform manner; the prioritisation and sequencing of implementation should vary as determined by the nature and characteristics of each economy, and also by the development strategy it adopts. The assignment of priorities is essential to strategic thinking.

Below, we outline broad features of policies and matters for consideration in four (4) areas, which are considered as important components under Industrialisation Strategy, namely, **4.1 industrial development policies including trade and investment promotion; 4.2 development of fundamental growth-driving functions; 4.3 agricultural and rural development as a basis for industrial development, and 4.4 the development of regional and extra-regional markets.**

4.1 Industrial Development Policies Including Trade and Investment Promotion

Sound macroeconomic policies, functioning infrastructure and stability of currency are all important factors needed for private industries to invest with confidence. In addition, measures for the strengthening of economic institutions, such as legal and regulatory frameworks governing incorporation, corporate governance, taxation and the restructuring of businesses and judicial systems for commercial-trade mediation and resolution of conflicts are also essential. In order to promote export, in addition to these measures, it may be worthwhile to consider adopting such export incentive measures as tariff reduction, subsidies and credit granting, as appropriate to the circumstances of each individual country, and where the adequate administrative capacities exist.

However, we recognise that it may not be easy for African countries to apply and institutionalise such systems across the country over the short term, given the current levels of market development and government capacity, and we would thus recommend that such policies and measures be adopted on a pilot basis by the use of Special Economic Zones (SEZs). Specifically, this recommendation involves the establishment of specific areas, for example, as export processing zones, free ports, or free commercial

zones, through creating necessary environments combining 'hard' infrastructure and 'soft' institutional measures to promote export and investment. Successes and failures learned in such experiments will be utilised for subsequent expansion to the national scale.

At the same time, as a means to promote industrialisation, Africa needs to consider not only ways to attract foreign direct investment, but to strengthen linkages with domestic supporting industries, hence the need for promoting SMMEs development. The formalisation of the informal sector is of particular importance in Africa, and as such, the following measures are critical; (a) the reform and streamlining of legal and regulatory systems; (b) the procedures necessary for formalisation as well as support for management, technology and marketing development; and (c) the provision of credit facilities to SMMEs, including micro-credit schemes, are critical.

In this context, forming 'industry clusters' in which the aggregation of SMMEs in specific areas benefits external economies in terms of better access to the market, pooling of technical expertise, easier acquisition of intermediate inputs and dissemination

of technologies, suggests a potential for the future development of SMMEs in Africa. Some of the cases of this are already seen in Kenya (apparel, metal processing, auto repair, seafood processing), Ghana (auto repair and metal processing) and South Africa (apparel). However, as some point out, many

clusters in Africa lack the strength of corporate ties thus yield limited results; hence governments should provide support by creating networks with chambers of commerce and producer unions in addition to providing physical and institutional infrastructure.

4.2.

Development of Fundamental Growth-Driving Functions

Provision of the basic functions in economy is indispensable to realise the strategy of industrial development. Deregulating the business environment is of primary importance to spur private sector investment. In the following section, we outline features of other functions, with particular emphasis on infrastructure, human resource and credit markets, which are all important for promoting economic growth through industrialisation.

4.2.1

Development of Infrastructure

The government is charged with maintaining many forms of infrastructure that sustain private sector economic activity, and as such, are fundamental to the expansion of private investment. Reliable electrical power supply, sufficient transport and port facilities, and efficient telecommunications systems are all necessary for the promotion of private industrial and commercial activities, and deficiencies in any of these can negatively affect overall economic development.

The following aspects deserve special attention in developing infrastructure in Africa based on the experience of Japan Bank for International Cooperation, Asian Development Bank and World Bank:

- While private investment is important in infrastructure development and needs to be promoted within the framework of a public-private partnership, the government also needs to play an important role in providing a minimum standard of services as ‘public goods’ to the public. Governments therefore must exert maximum efforts to secure the funds necessary

to finance such activities.

- To make infrastructure effective, not only initial investment but proper operation and maintenance (O&M) is imperative. Many countries in Africa have had issues in this respect in the past. The creation and management of a financial system that maintains proper O&M, including taxes and levies, as well as enhancing the O&M institutional capacities of relevant organisations are essential.
- Infrastructure projects represent potential for large profits and therefore present a risk for pervasive corruption. To prevent this, government procurement procedures should be made transparent and the judicial system improved to reduce opportunities for illegal profit-seeking. It is also important to strengthen civil society capacity so that it can exercise an oversight function by holding government accountable to the public.
- Infrastructure has major economic, social and environmental consequences, entailing the complex involvement of a broad range of stakeholders including various government organisations and politicians. Co-ordination between central and local governments is also important in the face of increased decentralisation. In this respect, the central government in particular must take an active role in exercising strong leadership and oversight in order to co-ordinate the various actors involved in the development of infrastructure.

4.2.2

Human Resource Development

Investment in human resource development for industrialisation needs to correspond to national priorities as defined by the country's industrialisation strategy. This involves technical training of the workforce required by individual industries, development of business management capacity in the private sector, development of institutional capacity to plan and implement an export-oriented industrialisation strategy and the improvement of related public services. In other words, providing a workforce apt for industry promotion requires not only enhancing basic education but also higher education and specialised training.

Furthermore, strengthening higher education and vocational training systems could constitute a strategy for promoting education as an industry. This would make contributions to the country's economy not only through developing domestic human resources but through attracting foreign students from neighbouring countries. Furthermore, the enhancement of education and training capacity, including physical facilities, could pave the way to future expansion of the research and development capacities of the country.

It is also very important to reverse the 'brain drain' trend of trained and educated manpower leaving Africa. There has been significant emigration of teachers, physicians, nurses and other highly-skilled workers from African countries to South Africa, the UK, the US and Australia as well as other countries. The amelioration of working conditions, including maintenance of security and public order and improvement in social security systems, as well as increases in employment opportunities resulting from the recent economic recovery in Africa, could pave the way to stop this flight as well as to provide incentives to lure overseas workers back home.

We should, however, note that overseas labour is not necessarily a negative factor, as demonstrated by the case of the Philippines, where remittances

from abroad contribute to the domestic economy, and the Philippine government promotes overseas employment of such skilled workers as nurses under a national strategy that encourages export of 'services'. This approach needs to pay due attention to meeting domestic demand for technical manpower as well.

4.2.3

Upgrade of Credit Markets

Many SMMEs, especially in the informal sector in Africa, are founded on the social networks of same ethnic groups, friends and relatives. The fund sources of these firms predominantly rely on unorganised finances based on these networks. However, the scale of these networks is limited, while access to institutional finance or other powerful ethnic networks is difficult in addition to transaction costs being high. Expanding the credit supply system is essential for endogenous development through the growth of local firms.

Despite liberalisation of the credit supply and interest rate setting, along with strengthening of monetary policy management in recent years, entrepreneurs in many countries still encounter difficulties in accessing credit due to the inadequate regulations and legal systems governing collateralization. This places de facto limits on small-business entrepreneurs who cannot use land as collateral for finance. Financial institutions refuse to accept movable and intangible assets as collateral on loans due to the high costs resulting from the cost of assembling secured loans and the slow judicial processes to recover and liquidate property, as well as the significant administrative bottleneck associated with public announcement of the assertion of security rights by lenders in the absence of appropriate registries. Accordingly, reforms of property rights in addition to the liberalisation of financial sectors are needed in order to expand credit markets.

Other specific measures to expand the credit markets in Africa include the following:

- Establish credit guarantee funds to provide credit support to SMMEs with inadequate collateral to procure funds from private banks.

- Enhance the screening capacity of financial institutions and, where appropriate, lower the loan-refusals for SMMEs.
- Develop the direct financial market and build a

stable credit-supply system to meet the various financial needs of SMMEs.

- Facilitate integration of the microfinance from the informal sector into formal banking system.

4.3.

Agricultural and Rural Development as a Basis for Industrial Development

As seen already, the key to SGA in Asia was export-oriented industrialisation, which was preceded by agricultural and rural development, including the 'Green Revolution'. The increase in agricultural productivity witnessed in Asia was achieved through the introduction of high-yield variety crops, which resulted in a higher productivity per acre. But the introduction of high-yield variety crops must be packaged with irrigation and fertilisers to maximise the potential of the variety to contribute to productivity increases. Productivity for agriculture, most importantly that of cereals in Africa, has been in declining since the 1980s, precisely for the lack of these two inputs: irrigation and fertilisers. In Africa, like in Asia, for long-term growth to be achieved, increases in agricultural productivity and the development of rural communities should run in parallel with industrial development, and should involve the following measures:

- Proper management of natural resources and soil conservation
- Development of irrigation and drainage facilities
- Development, multiplication and distribution of higher-yield variety crops, and efficient and stable supply of fertilisers
- Strengthening of agricultural credit
- Reform and streamlining of marketing systems (including those for exports)
- Improvement of rural infrastructure and social services

To promote modernisation of agriculture and enhance productivity, improving access to such inputs as seeds, fertilisers, pesticides and farm machinery is

essential. Subsidies for the purchase of inputs have been restrained in principle since the introduction of the structural adjustment. Yet, given the importance of agriculture for overall growth and development in Africa, when and where the commercial distribution of these inputs and access to credit for procuring them are limited, especially in rural areas, the introduction of subsidies for the inputs deserves consideration, with due attention given to the maintenance of transparency,.

On the other hand, there is increasing number of cases where market-led commercial agriculture has been acting as a driving force of growth in Africa. Some of the main players in this field are the retailers, distributors and restaurant chains of South Africa, which provide a supply chain linking producers to consumers and offering market opportunities for many entrepreneurial smallholding farmers. Horticulture farming in Kenya and Ethiopia, for example, is another case of growth-driving agriculture. Producers of horticultural products are now part of a global supply chain servicing markets in Europe and the Middle East. Some participate in large-scale commercial farming operations, realised with European capitals, that manage their own production-marketing-sales systems.

Improvement in product quality as well as productivity is necessary in order for African farmers to participate in these international supply chains. Technologies for maintaining and controlling the quality of harvested crops, processing techniques for adding value to raw agricultural products, the establishment of certification, standardisation and

quality control systems, as well as the strengthening of regulatory and inspection bodies are all essential. Given the recent heightened concerns over food safety and genetically modified agricultural products, increased capacity is needed on the part

of government and private sector alike to ensure compliance with food hygienic standards and regulations governing residual pesticides of target countries.

4.4

Development of Regional and Extra-Regional Markets

Industrialisation Strategy must also take demand-side (i.e. market) conditions into account. This is evident from the case in Latin America in the 1960s when a government-led industrialisation trial based on the premise of import substitution faltered because of the small domestic market.

Developed countries should not be considered as the sole potential markets for export for African countries: given their comparable stage of development and technological levels, it is quite realistic for African economies to view exporting to neighbouring countries in Africa and other developing regions as a stepping stone. And as the Asian experience suggests, building a network of real economies, which includes expansion of trade in intermediary products in addition to seeking markets for final products, is essential to improve productivity. This entails efforts to explore new export markets outside of the African continent, such as the Indian Ocean-rim region besides strengthening intra-African economic ties.

For this to happen, the development of common economic systems through the New Partnership for Africa's Development (NEPAD) process, free trade agreements (FTA), customs union, and monetary union should be extended. Also, reform efforts should be made to enhance access of African products to extra-continental markets by realising, for example, a Pan-Indian Ocean free trade initiative. In addition, cross-border infrastructure needs to be developed as an essential contribution to reinforcing regional markets, let alone for lifting trade barriers.

Economic integration is a highly political process, whether it takes place in developed or developing economies. It is vital for a political leader not only to recognise that economic integration is a must for materialising industrialisation strategies but also to own a strong political will to implement it. Moreover, capacity building of the Regional Economic Communities (RECs), which facilitate actual integration, is also important.

5.1.

Contributions by the international community

The international community is urged to encourage African efforts to attain sustained growth acceleration through industrial development strategies by addressing the following considerations:

- **Support for diverse strategies and policy measures to accelerate growth in Africa**

The international community should actively support African countries that exhibit firm political commitment for economic development, and assist them in adopting a prioritised industrialisation strategy and necessary measures to implement it.

- **Improve market access for African products**

To facilitate the export of African products, the international community should maintain and promote the use of preferential trade arrangements for Africa such as AGOA and EBA, and endeavour to improve the system, in such a way as to promote industrialisation, for example through reexamining the application of the certificate of origin among other things. Asian countries, including Japan and those that border the Indian Ocean with African countries, also need to make efforts to improve market access to African products.

- **Promotion of Aid for Trade (A4T)**

To bolster the export capacity of Africa through invigorating private sector activity, the international community should further improve the business environment by assisting African countries in providing physical infrastructure, strengthening legal systems and streamlining paperwork. Financial and capacity-building assistance is also needed for SME promotion, export development, quality improvement, a quality standards, certification system, reforms and better application of food safety and quarantine standards. The

international community and donors should also support placing these A4T measures at the heart of each African country's mid-term development strategies and plan.

- **Support for large-scale and cross-border infrastructure investments to build regional markets**

Developing regional infrastructure for transport, telecommunication and electricity is essential for forming markets within Africa and linking them to the world. The international community should promote large-scale and cross-border infrastructure building currently conducted under NEPAD and the African infrastructure consortium. This should be combined with support for developing 'One Stop Border Posts', which cut the time and costs required for border crossing.

- **Promote the development of human resources through continued support for achieving the MDGs**

The development of basic human resources through health, hygiene, education and HIV/AIDS prevention measures builds an extremely important foundation for Africa's industrial development. The international community should continue its assistance for achieving the MDGs. Meanwhile, adequate support for various regional strategies mostly by AU on the issues on such as education, human resource development, disease and health as well as sub-regional alliances needs to be promoted by regional economic organisations such as Southern African Development Community (SADC).

5.2 Contributions by Japan

We also urge the Japanese Government to support the promotion of industrial development in African countries in accordance with the basic principles listed below:

- **Respect for the uniqueness of individual country settings and aspirations**

In the spirit of respecting the ownership of the recipient country, which is one of the guiding principles of Japan's development assistance and of TICAD, Japan should engage in assistance with due consideration to each country's latent potential based on its nature, politics, economy and social environment.

- **Respect for partnership with African countries**

In the spirit of respecting partnership, which is also a guiding principle of TICAD, Japan should maintain a relationship of equals and proceed with development in co-operation with each country

- **Emphasis on working in closer co-operation with Japan's private sector**

Recognising the activity of the private sector as the primary driver of economic growth, Japan should review its conventional approach of providing ODA solely on a government-to-government basis, and engage more actively with the Japanese private sector whose investments can make a real contribution to African development.

- **Emphasis on integrating various ODA instruments (grant, loan and technical assistance) and OOF facilities available under one comprehensive strategy**

To support the African development, Japan should develop long-term development and assistance strategies together with African partners, and should support infrastructure development, institution building and human resource development as part of such strategies. To achieve this, JICA and JBIC should bring together their various ODA instruments to collaborate in synergy, while also evolving a comprehensive approach to

assistance that would include Other Official Flows (OOF) such as investment financing and trade insurance.

5.2.1

Proposed Support Measures by the Japanese Government for Promoting Industrial Development in Africa

(1) Support for the development of 'industrialisation strategies' based on policy dialogue (primarily through technical assistance)

Technical assistance for the formulation, implementation and monitoring of tailor-made 'industrialisation strategies', which incorporate Asian experience when appropriate and involve a broad range of stakeholders from government, academics and the private sector. **[See APPENDIX 3-1: Support for the Investment Climate Development in Zambia, Economic Policy Formulation in Vietnam and Tripartite Co-operation among Japan-Vietnam-Mozambique]** Priority for assistance should be given to those countries that have achieved a certain level of macroeconomic and political stability and those that demonstrate clear government commitment for industrial development.

Provision of practical advice from industrial development experts to help develop individual sector and sub-sector policy and strategy, as well as the promotion of information and opinion exchange with the Japanese private sector through a training programme in Japan.

Through these processes, Japan would help promote Africa's planning capacity and the public-private trust and greater information sharing.

(2) Support for the development of export products and marketing promotion (primarily through technical assistance)

Technical assistance for improving productivity, quality, cost-competitiveness and packaging and

branding of products in promising industries. **[See APPENDIX 3-2: Support for Shea Butter from Ghana and the Support for the Kenya Export Promotion Council].**

The strengthening of standardisation and quality control systems of industrial products; the improvement of food safety and quarantine systems of agricultural products, as well as capacity building of regulatory and inspection bodies in charge of export agricultural products; and dissemination of product certification systems among farmer organisations and private enterprises.

Support for co-development of overseas markets and co-improvement of quality with JETRO, NGOs and fair-trade organisations for African products.

(3) Support for nurturing supporting industries (SMMEs) and industrial clusters (primarily through technical assistance and non-sovereign finance through EPSA)

Promotion of strengthening measures for FDI-local enterprise linkage in the following areas, in order to maximise impact on the domestic economy while avoiding the emergence of an enclave economy' brought about by FDI:

- Provision of incentives for foreign firms to work with domestic enterprises
- Establishment of mediation agencies for foreign and domestic firms (introduction of domestic firms that meet quality standards and quantity required by foreign firms)
- Enhancement of manufacturing and processing capacities for raw materials, parts and semi-processed products for foreign firms (supermarkets and urban apparel stores)
- Development of local company workforce including skills training
- Reinforcement of financial services for local firms through commercial banks and microfinance

Support for the reform and streamlining of laws and regulations necessary for the 'formalisation' of informal sectors, strengthening of management,

technology and the marketing, unionising of SMMEs and the expansion of financial services for SMMEs.

Support for development of a skilled workforce and strengthening management capacity to facilitate the formation of industry clusters as well as to facilitate the vertical integration of existing clusters.

(4) Support to enhance science and technology education, including ICT (primarily through technical assistance and grants for facilities and equipment)

Support for improving the quality of primary education, expanding secondary education to absorb primary education graduates, strengthening science and technology education and education for girls.

Support for the formulation of strategic plan to develop human resources with technical skills and knowledge that is based on each country's national industrialisation strategy and the realities of and outlook for labour market supply and demand, premised on labour market fluidity.

In response to globalisation, support for strengthening science and technology education, including ICT, from the perspective of future industrial development. **[See APPENDIX 3-3: Support for the Promotion of Science and Technology Education in Rwanda]** and expansion of support for the vocational training system to enhance skills of industry human resources – development of Southern African sites. **[See APPENDIX 3-4: Support for Vocational Training Institutes in Senegal and Uganda]**

Support for research and education capacity building for African institutions of further education through the south-south co-operation, using a network of further education institutes in Asia. **[See APPENDIX 3-5: Support for the African Institute of Capacity Development (AICAD), the ASEAN University Network/ Southeast Asia Engineering Education Network (AUN/SEED-Net)]**

(5) Support for infrastructure development, including cross-border infrastructure

(primarily through loans, grants and technical assistance)

Active support for development of regional infrastructure (including international transport corridors and One Stop Border Posts) based on the Mid- to Long-Term Strategic Framework (MLTSF) of the NEPAD African Infrastructure Consortium to cut delivery costs, promote economic integration of inland and coastal countries and form a regional market. **[See APPENDIX 3-6:Support for the Cross Border Corridor Development between Senegal – Mali, Tanzania – Kenya and in Mozambique]**

Developing transport infrastructure with special attention to linking coastal cities that function as economic centres of the region and the hinterlands via international corridors including regional hub ports is important. Along with international corridor development, facilitating One Stop Border Posts (OSBP), which unify and streamline border clearance procedures including customs, immigration and quarantine, is also essential. For this system to function, support for both ‘hard’ infrastructure and ‘soft’ operational capacity is important. **[See APPENDIX 3-7: Support for the Development of a ‘One Stop Border Post (OSBP)’ on the Kenya-Tanzania Highway]**

Support for strengthening the planning and co-ordination capacity of Regional Economic Communities (RECs) is needed, as the body is responsible for coordinating project priorities, funding arrangements and related legal systems among neighbouring countries in developing international corridors.

In Africa, where many countries are dependent on hydroelectric power, ensuring a reliable power supply is an enormous task. Thus, support for a cross-border power supply plan, the development of generation and transmission capacity and building the management capacity for facilities is essential. **[See APPENDIX 3-8: National**

Electrification Programme in Zambia and Bujagali Interconnection Project in Uganda]

(6) Support for agricultural and rural development

(primarily through technical assistance, grants and loans)

To realise the productivity improvement of the African agriculture in a sustainable manner, comprehensive assistance is needed including support for policy making, agricultural research, infrastructure development including irrigation and rural roads, extension of agricultural technologies, development of improved varieties, provision of agricultural inputs and post-harvest processing.

Given Japan’s comparative advantage and the expansion of rice consumption and import in Africa, it is important for Japan to support for the increase of rice production, including the extension of ‘New Rice for Africa (NERICA)’. Japan should also develop and disseminate rice-cultivation technologies that apply to a variety of ecological and cultivation systems such as rain-fed upland farming, rain-fed swamps and irrigation rice farming. **[See APPENDIX 3-9: Support for Comprehensive Africa Rice Development Initiative (CARDI)]**

Support for rural development through the promotion of diversified economic activities within rural communities, development and maintenance of rural infrastructure and the empowerment of the rural population through the strengthening of health and education services.

To promote commercialisation of agriculture, including promotion of export crops, it is important to enhance capacity of the relevant institutions and stakeholders that can respond to the quality standards and requirements of the export market, to introduce a certification system in African countries and to strengthen the capacity of food-safety testing and quarantine institutions as well as supporting infrastructure development, the dissemination of cultivation and post-harvest processing technologies, and strengthening the capacity of farmer organisations.

5.2.2

Proposed Support Measures for the Japanese Government to Create a Favorable Trade and Investment Climate in Africa

(1) Improvement of market access for African products

Expansion of market access for African products is indispensable to strengthen the competitiveness of African products in the global economy: hence Asian countries, including Japan, are urged to improve the market access of goods produced in Africa. [See APPENDIX 3-10:

Seminar on Trade and Investment Promotion in the Indian Ocean-Rim Economic Region]

The Japanese government already offers favorable export conditions to Developing Countries (LDCs) through a preferential tariff arrangement known as the Duty-Free Quota-Free Access for LDCs (DFQFALDC). While the items targeted under this arrangement have been expanded to 98 percent of all goods traded, further improvements should be explored; by raising awareness among African countries about the existing DFQFALDC through disseminating its content and the procedural requirements needed to benefit from it; by supporting the strengthening of capacity to respond to export requirements; and by exploring the possibility of more flexible application of the agreement to African countries.

African countries are encouraged to target other Asian markets, in addition to Japan, particularly those located in the Indian Ocean-rim region, for potential future markets, where greater demand for African goods are expected. The Japanese government is urged to facilitate talks among Asian countries, to improve market access for African products in this region.

(2) Support to Japanese private firms for the promotion of trade and investment in Africa

The interest of Japanese firms in Africa-targeted trade and investment has been growing over recent years. To further support this interest, the Japanese government should make more

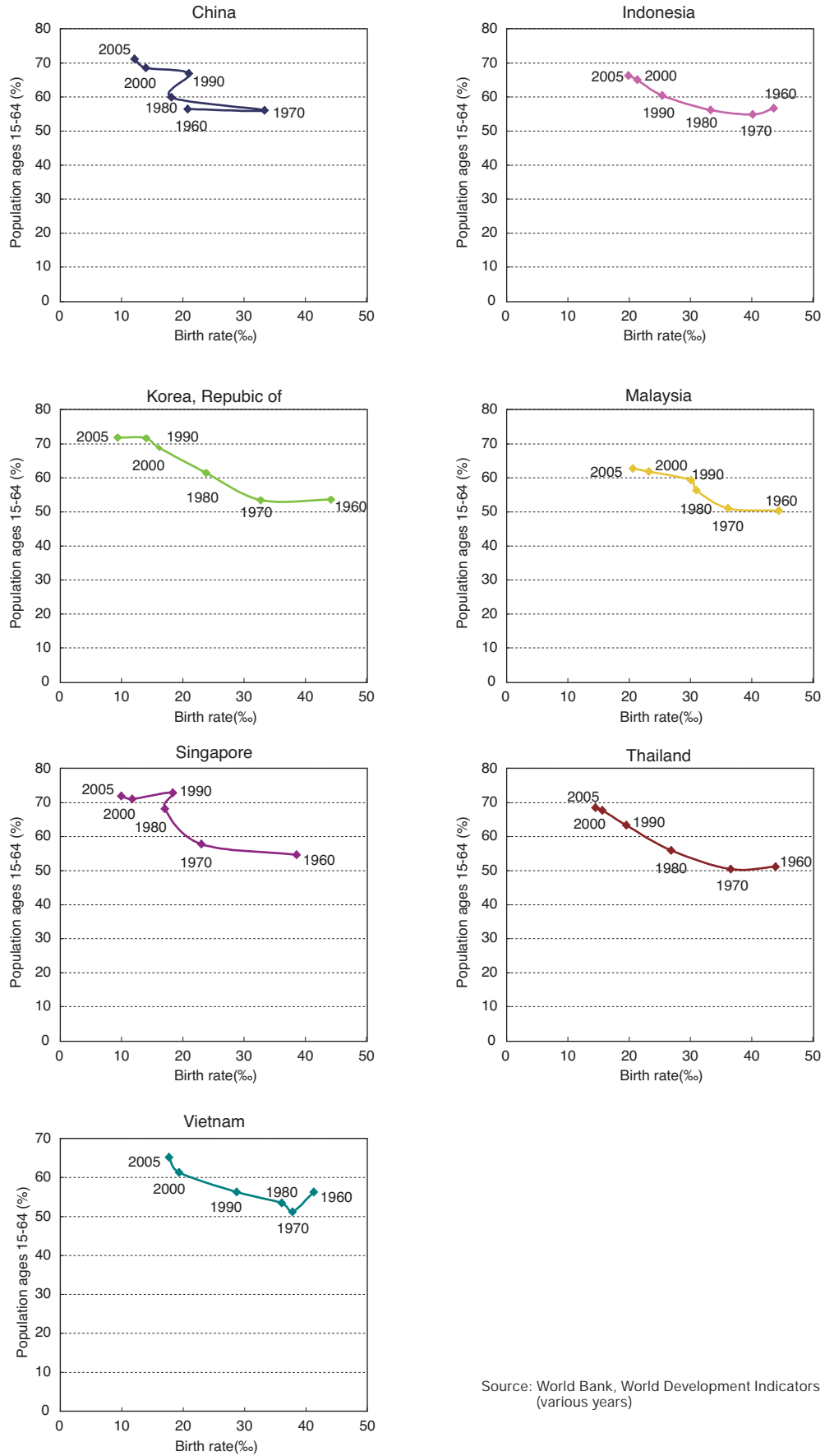
information on the African markets available to them through JETRO and it should examine measures that would lend direct support to facilitate trade and investment activities of Japanese private firms with Africa.

Specific measures should include; support to Japanese private firms investing in and trading with Africa through investment finance from JBIC, more flexible application of public export credit schemes for trade promotion and linking-up of private investment and ODA projects (support to infrastructure development, support to CSR activities, etc). To facilitate Japanese private investment in Africa through a public-private alliance, development of an ODA proposal with private sector participation should also be encouraged.

Support to improve trade and investment laws and the capacity building of trade and investment promotion institutions in Africa are also important to enhance the export promotion capacity of African countries; thereby making Africa become a more attractive destination of FDI including that from Japan.

APPENDIX-1
Tables and Figures

● 1-1 Trends of Birthrate and Work-age Population in Asia (Emergence of Demographic Dividend)



Source: World Bank, World Development Indicators (various years)

After the 1970s, all countries demonstrated the simultaneous trend of lowered birthrate and increased work-age population over the decades, with exception for China and Singapore showing the short-lived rise in birthrate during the 1980s.

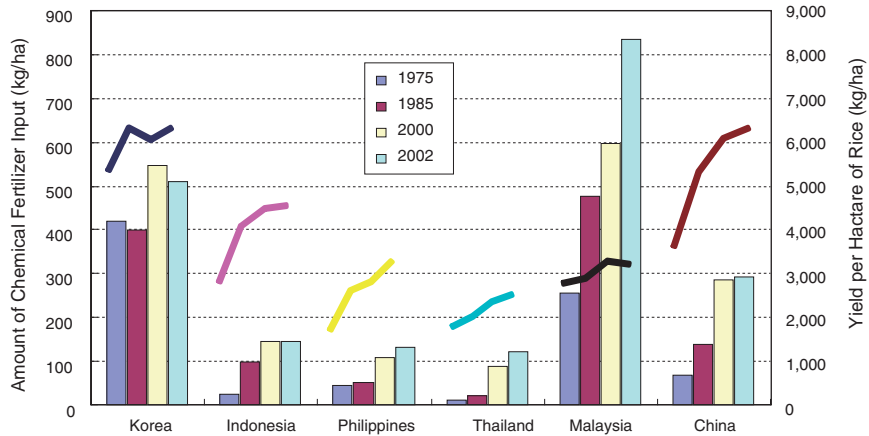
● 1-2 Era of Developmentalism in Asia

	45	50	55	60	65	70	75	80	85	8788	90	92	95	97	2000
Korea			Rhee Syngman			Park Chung-hee		Chun Doo-hwan		No Tae-woo		Kim Young-sam			Kim Dae-jung
		49					75	78		88					
Taiwan			Nationalist Party			Chiang Ka-shek		Chang Chng-lac				Lee Teng-hui			Chen Shui-pien
	46	48	53	57	61	65			86			92			98
Philippines			Quirino	Magsaysay	Garcia	Macapagal		Marcos		Aquino		Ramos			Estrada
							65								99
Indonesia			Sukarno			Golkar		Suharto							Wahid
			55	59	65								90		Habibie
Singapore			Labor Party	People's Action Party		Lee Kuan Yew									Goh Chok Tong
			57			70	76	81							
Malaysia				UMNO	Rahman	Razak	Hussein					Mahathir			
	46	48	5758		63	73	75	80	88	91					
Thailand			Phibun	Sarit		Thanom		Prem		Charchai					Chuan
							76								
Vietnam			Indochinese Communist Party			Vietnam Labor Party									Vietnam Communist Party
		48			62					88					
Myanmar			U Nu		Burma Socialist Programme Party	Ne Win									SLORC

Suehiro, Akira 'Catch-up Industrialization'. Nagoya University Press, 2000

The governments under the following leaders are regarded as representatives of the 'developmental state' in Asia: Park Chung-hee and Chu Doo-hwan (South Korea), Chiang Kaishek and Jiang Jingshuo (Taiwan), Ferdinand Edralin Marcos (Philippines), Mohammed Suharto (Indonesia), Lee Kuan Yew and Goh Chok Tong (Singapore), Mahathir Mohamad (Malaysia), Sarit Thanarat and Thanom Kittikachorn (Thailand).

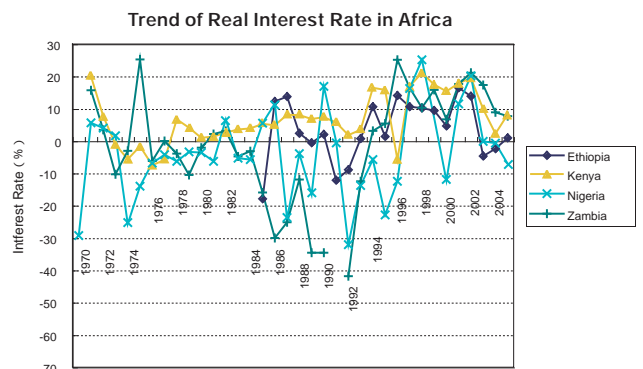
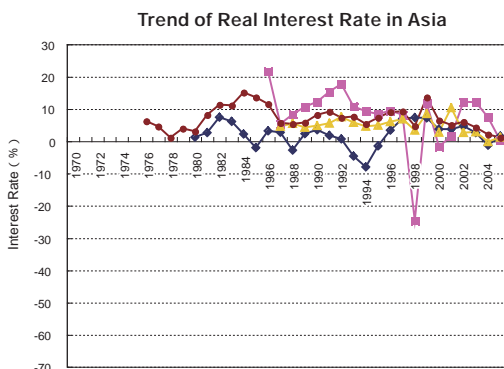
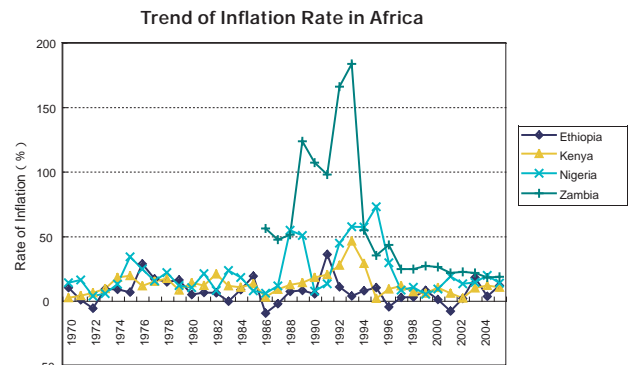
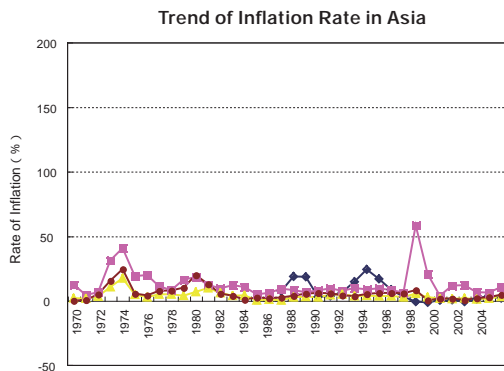
● 1-3 Trends of Chemical Fertilizer Input and Land Productivity of Rice in Asia



Source: JBIC Institute

The Asian countries' experience demonstrates a strong correlation between the increased application of chemical fertilisers which accompanied the introduction of high-yield varieties and the improvement in land productivity ('Green Revolution'). There was even a sharper improvement in land productivity in comparison to the amount of fertiliser used in Indonesia, the Philippines and China.

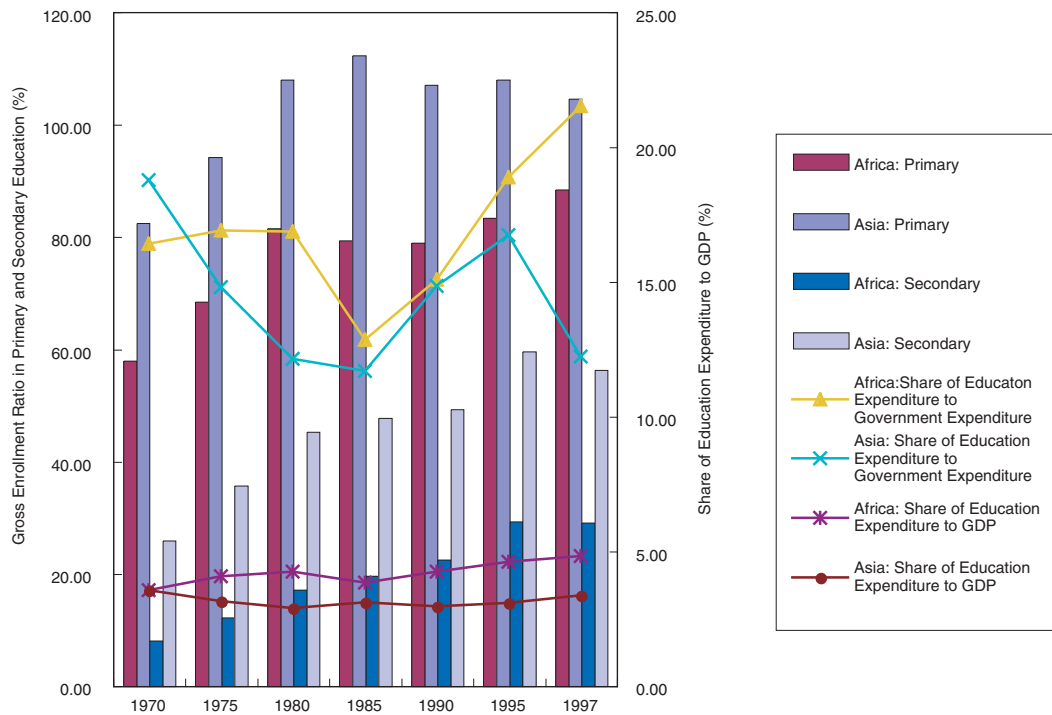
● 1-4 Trends of Inflation Rate and Real Interest Rate in Asia and Africa



Source: World Bank, World Development Indicators (various years)

In terms of the inflation rates, the Asian countries have maintained the inflation rates at relatively low levels except the period of the Asian currency crisis. African countries, on the other hand, have often had higher inflation rates with large fluctuations. In terms of the real interest rates, the Asian countries have mostly maintained the real interest rates positive while lowering the risk of owning financial-asset. The African countries have often had the real interest rates negative with large fluctuations.

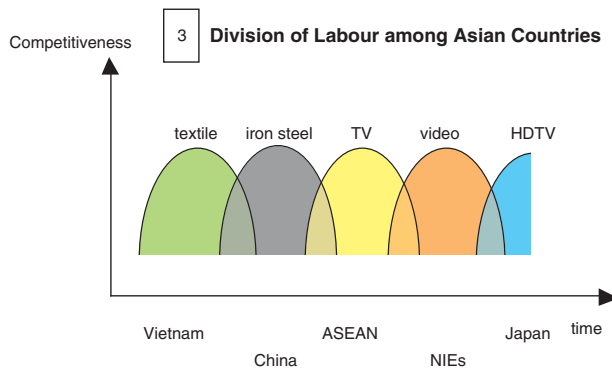
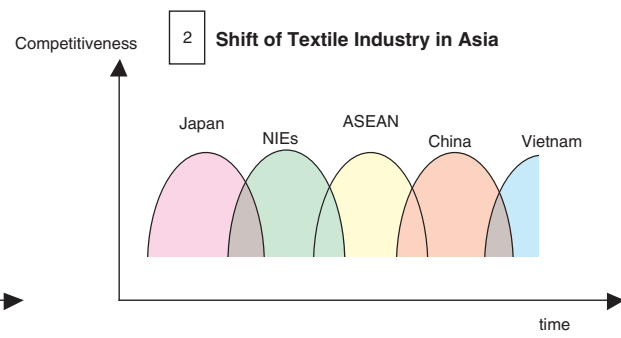
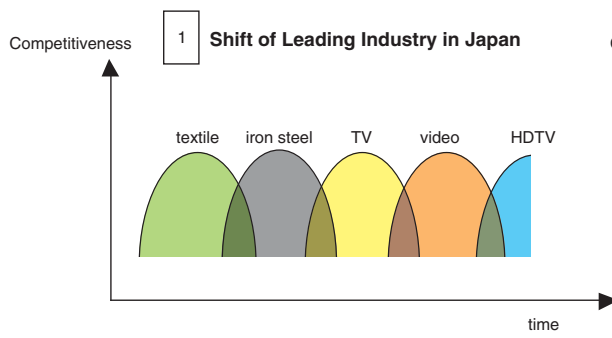
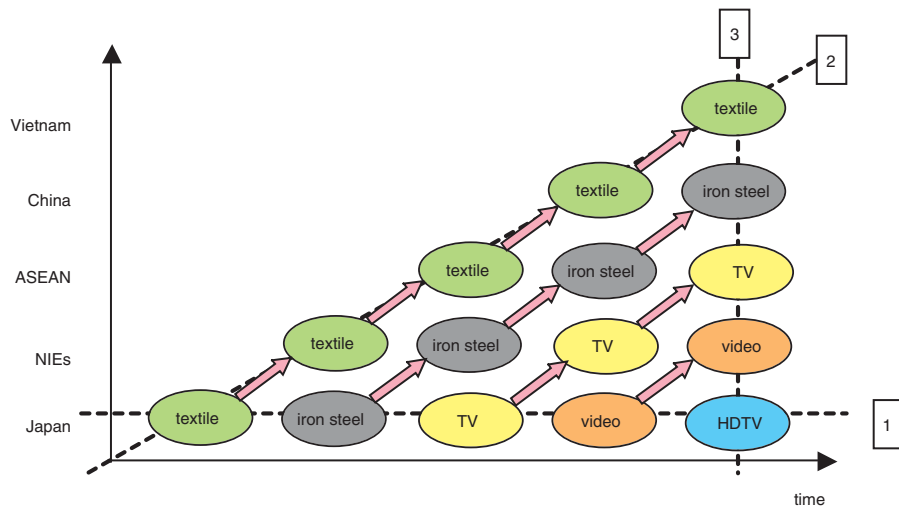
● 1-5 Gross Enrollment Ratio in Primary and Secondary Education and Share of Education Expenditure to GDP in Asia and Africa



Source: World Bank, World Development Indicators (various years)

In Asia, the share of education spending within the entire government expenditures was not as high as those of African countries during the 1970s and 80s. However, the gross enrollment rate in Asia for primary and secondary education was kept much higher than that of African countries throughout the period as the allocation priority was given to this level of education.

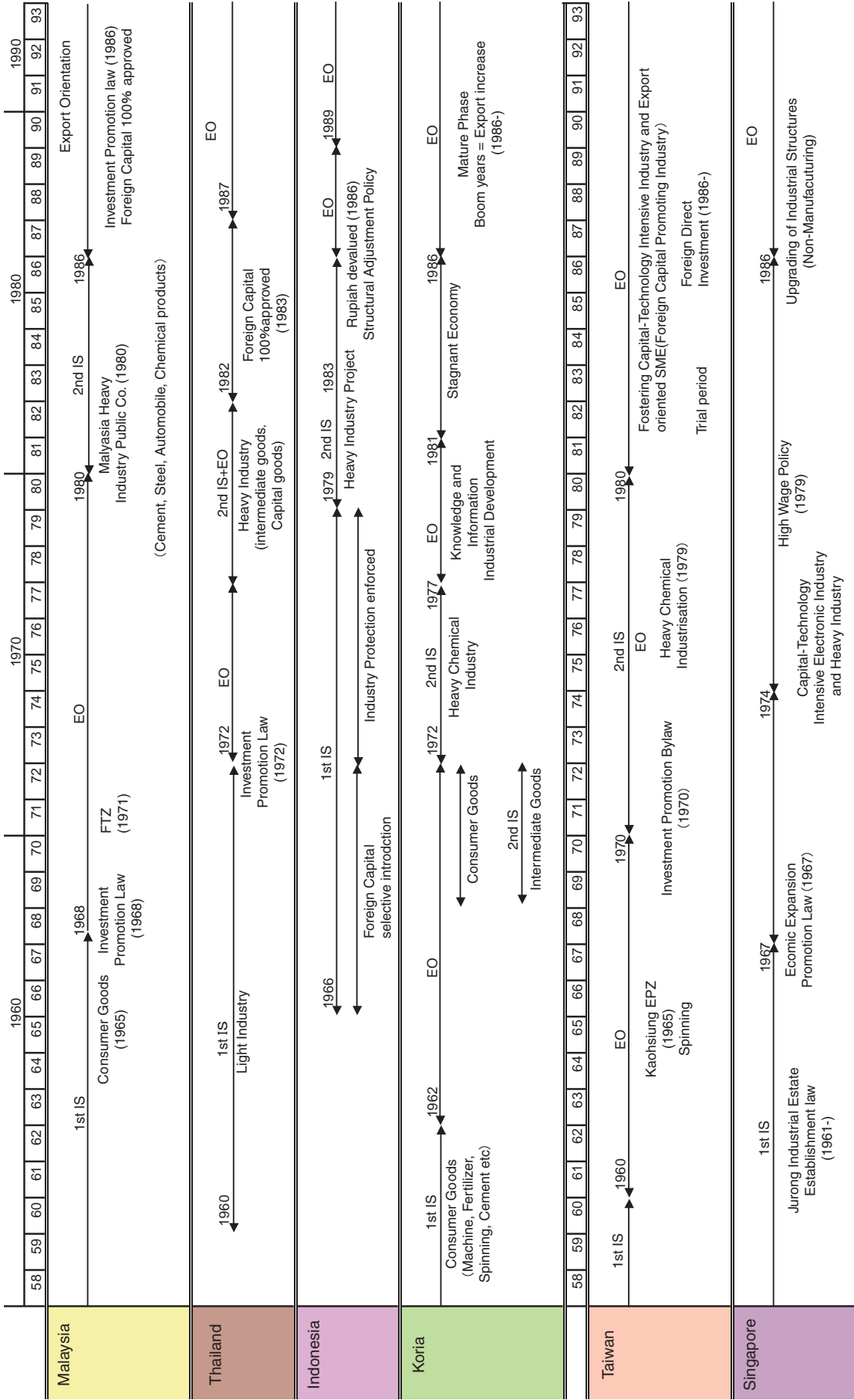
● 1-6 Pattern of Industrial Structural Change in Asia



Source: Ohno, Kenichi, Kojiro Sakurai 'East Asian Development Economics' Yuhikaku, 1997

In Asia, industrialisation proceeded from the lower level to the higher one with a clear order and sequence within a country and among countries. For example in Japan, its leading industry shifted from the light industry to the heavy and chemical industry, then to the assembly and the electronics industry. (See line ①) In terms of the textile industry, the main exporting country shifted from Japan to NIEs, ASEAN countries, China and then to Vietnam over time. (See line ②). If seen at a particular point of time, there is a clear division of labour among Asian countries maintaining different level of industries. (See line ③).

● 1-7 Trends of Industrial Development Strategies in Asia



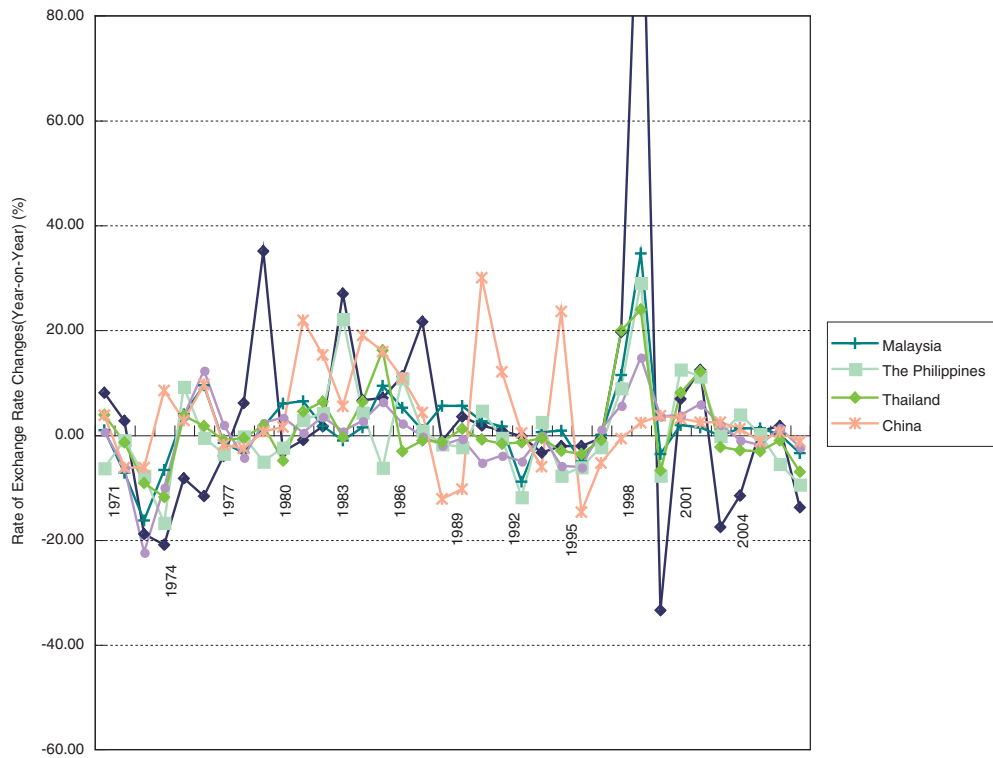
IS : Import Substitution Strategy EO: Export-Oriented Strategy

Source: Kuchiki, Akifumi, 'Industrial Cluster in Asia' Shoseki-Kobo-Hayakawa, 2007

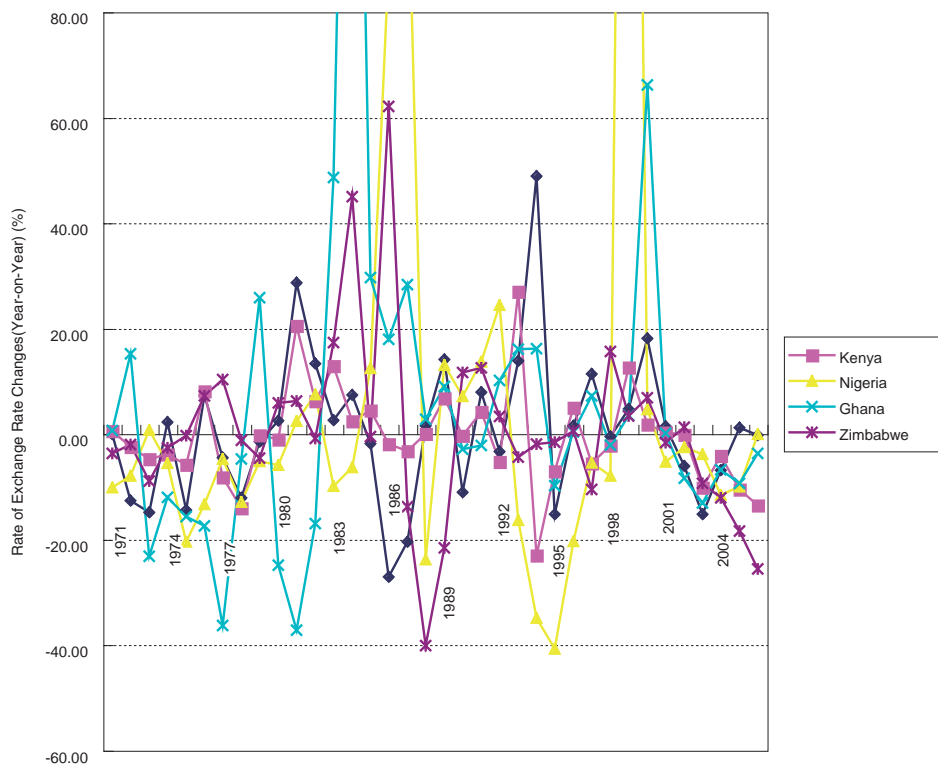
From the 1960s through to the 80s, the Asian countries promoted industrialisation in a strategic manner by adopting Import Substitution Policy (IS) and Export Oriented Policy (EO) for light and heavy industry at different times and sometimes in a cyclical manner; thus fostering domestic productive capacity while promoting export. During the second IS period (for heavy and chemical industry), many countries pursued EO policy simultaneously. After this period, most Asian countries shifted to EO in the 1990s.

● 1-8 Trends of Exchange Rate Changes in Asia and Africa

Changes in Real Exchange Rate for Selected Asian Countries



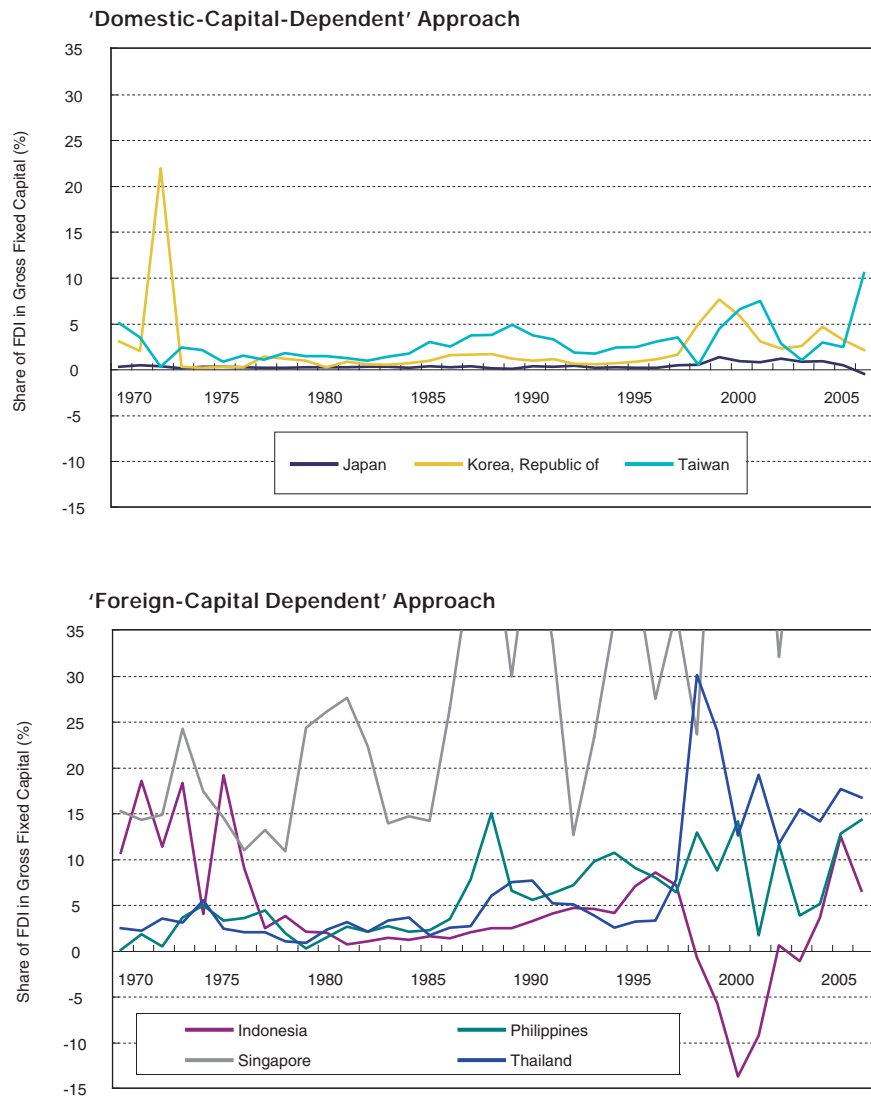
Changes in Real Exchange Rate for Selected African Countries



Source: World Bank, World Development Indicators (various years)

The Asian countries maintained the exchange rate changes at a relatively low level for most of the time except for the Asian currency crisis period, which contributed to the stable promotion of export. While in Africa, the exchange rate was extremely volatile during the 80s, and the 90s for some, which made it difficult for these countries to have competitive exchange rate suited for export promotion.

● 1-9 Diversity of Industrial Development Strategies in Asia



Source: UNCTAD, FDI database

Dependency on foreign capital is generally low for Japan, South Korea and Taiwan as the share of FDI against gross capital formation in these countries amounts to not more than 5% for most of the period. While in ASEAN countries, the FDI dependency is extremely high, as the ratio hovers around 10-15% for Indonesia, the Philippines and Thailand after the 1980s (except for the Asian currency crisis period), not to mention the case of Singapore which is highly dependent on foreign capital.

APPENDIX-2
Case Studies of Asian Industrial Development

A. Development Strategies of Natural Resource-Rich Countries

<Management of Resource Curse: Indonesia> (Experience)

During the 1970s to the mid-1980's Indonesia embraced a balanced budget strategy, while still taking advantage of foreign borrowing. This strategy was relatively stable, as Indonesia ensured that its fiscal deficit as a proportion of its GDP remained extremely low. Unlike other oil-producing countries during the oil boom years, Indonesia did not use its revenue from oil exports to finance large amounts of debt. Moreover, Indonesia properly employed demand-side management policy through the accumulation of a fiscal surplus and by sharply devaluing the rupiah against the US dollar. These actions were taken despite the sudden increase in oil export earnings resulting from the second oil crisis in 1978. However, during the previous six years, Indonesia's regime had been operating on a fixed exchange rate. The resulting overvaluation of its currency over the real exchange rate not only created inflationary pressure, but also generated fears that the overvaluation of the rupiah was diminishing the competitiveness of non-oil export sectors (i.e. the manufacturing and agriculture).

Thus, the eventual devaluation of the rupiah resulted in an increase in the exportation of non-oil goods, and Indonesia avoided a dramatic drop in total export

earnings experienced by other oil producing nations when the world oil prices plunged in 1983. To sustain the results of the 1978 devaluation, Indonesia devalued the rupiah twice more, once in 1983 and again in 1986. Both proved successful. Other oil producing countries confronted a rise in their real exchange rates as a result of the oil crisis and a rapid increase in oil earnings. However, Indonesia was able to sustain the effects of the lower real exchange rate due to their successful implementation of appropriate policy.

In addition to the above macroeconomic policies, Indonesia spent much of its oil revenue on infrastructure, social services, agriculture and the manufacturing sector. Particular focus for investments was placed on tradable-goods within the manufacturing and agriculture sectors. While these goods may be vulnerable to Dutch disease in the long-term, Indonesia succeeded in bolstering its production base as well as maintaining and expanding exports through improved productivity and supply capacity.

(Lessons learned)

- An effective macroeconomic stabilisation policy, including a timely exchange rate policy, is crucial for economic stability and development.
- The Gol evaded the Dutch disease by allocating petroleum revenue to enhance the productivity and supply capacity of the tradable-goods sector.

● **Table: Changes in Indonesian Consumer Prices and Exchange Rate**

	Consumer Prices (1975=100)	Nominal Exchange Rate (1975=100)	Real Exchange Rate (1975=1,00)
1970	41,3	87,4	0,92
1971	43,1	94,4	0,84
1972	45,5	100,0	0,76
1973	59,9	100,0	0,83
1974	84,4	100,0	0,94
1975	100,0	100,0	1,00
1976	120,4	100,0	1,21
1977	133,5	100,0	1,21
1978	144,3	106,5	1,12
1979	170,1	150,1	0,81
1980	196,4	151,1	0,82
1981	220,4	152,2	0,94
1982	241,4	159,4	1,02
1983	269,9	219,1	0,86
1984	297,9	247,2	0,87
1985	312,1	267,6	0,84

Source: Usui 1997 The Oil Syndrome and Economic Policy in Indonesia and Mexico, The Technical Bulletin of Faculty of Horticulture, Chiba University Vol.51 (19970328) pp.215-226

A. Development Strategies of Natural Resource - Rich Countries

<Using Revenue Generated through Oil and Mineral Resources for Agricultural and Rural Development : Indonesia>

(Experience)

Since the early 1950s Indonesia has sought to achieve self-sufficiency in food supply and has promoted policies to increase its food production. From this key objective, grew a national movement to increase rice production, which enabled Indonesia to attain self-sufficiency in rice during the time of their fourth national development plan (1984-1989).

Looking at Indonesian agriculture as a whole, one can see that the increase in agricultural production from the end of the 1960s to the end of the 1980s was remarkable. In fact from 1968 to 1990 all seven of Indonesia's principle crops (lowland rice, upland rice, corn, cassava, sweet potato, peanuts, and soybeans) registered increases in both production volume and yield per hectare. In particular, lowland rice, peanuts and soybeans showed significant growth in production volume, and lowland rice assumed an even greater importance.

From the end of the 1960s to the present, the rice harvested area of Java has increased, although the actual area under production for lowland rice in Java has scarcely changed. This fact may reflect an expansion in double and triple cropping due to the increased use of high-yield varieties with a shorter growth period. These varieties became much more wide-spread with the Green Revolution. Meanwhile on the outer islands, during the years from 1980 to 1990, the area of paddy fields increased 1.3 times. Since few paddy fields have the stable irrigation and drainage systems which would allow for double cropping, expansion of the rice harvested area in the outer islands may be due to an increase in the cultivated area itself through land reclamation.

Many different reasons contributed to getting Indonesia on track for this high growth in rice production. Overall the expansion in rice production is attributed to high yield varieties which were disseminated through the Green Revolution beginning in the late 1960s. However, another important factor was the introduction of new resistant varieties to overcome damage from disease and harmful insects. Finally, the use of chemical fertilizers increased dramatically starting in the 1970s, making yet another significant contribution to the increase in rice yields.

These advances resulted from the Indonesian Government's measures to increase rice production, along with its investment in improved varieties, fertilization and irrigation technologies of the Green Revolution, various types of agricultural finance, rice producer price support and improvements in the fertilizer-rice price ratio¹. From the perspective of government investment, subsidies for chemical fertilizers and irrigation development were vital. Subsidies for chemical fertilizers managed to keep fertilizer prices low. Such measures were possible despite the rises in world oil prices during the two oil crises because (i) domestic fertilizer production was monopolized by state-run/public enterprises, (ii) during the 1970s self-sufficiency in fertilizers increased sharply, and (iii) Indonesia was a producer of oil and natural gases, that were used to make chemical fertilizers. In addition to this support for fertilizers, when comparing the periods of the first national development plan (1969-1974) and the third national development plan (1979-1984), one can see an 8.6-fold increase in the development budget allocation for the rehabilitation of irrigation facilities, the expansion of irrigated areas, and a high level of national investment in irrigation.² These investments were also funded with earnings from oil and natural gases. Hence, one can see how Indonesia's economic development from the 1970s

¹ The BIMAS scheme (scheme under which the government gives farmers preset packages of inputs (seed of new rice varieties, chemical fertilizers, agricultural chemicals) in exchange for credits issued by Bank Indonesia and the farmers repay a percentage of the harvest yield in cash or in kind) and the INMAS scheme (scheme under which farmers are not obliged to receive credits or packages and the government leaves it to the farmers to obtain inputs and provides only technical guidance on farming using new varieties) were adopted. It is fair to assume that the increase in rice production in Java mainly at the end of the 1970s is attributable to the INMAS framework.

² Comparison on a dollar basis.

to the early 1980s was in many respects supported by the increased production of oil and natural gases. Moreover, the expansion of rice farming was largely dependent on the transfer of resources from the oil and natural gas industry.

(Lessons learned)

- Using earnings from oil and mineral resources made vital contributions to agriculture and rural

development, providing a basis for long-term economic growth

- Effectively combining supply-side support measures with (high quality seeds, chemical fertilizers, irrigation infrastructure and agricultural finance) and demand-side support measures (producer price support in the improvement of agricultural productivity, etc.) proved crucial for success

Table: Trends in Irrigation Development in Indonesia

(Unit: 1,000ha, a billion rupiah)

	1969-74	1974-79	1979-84	1984-89	1989-94	Total
Area						
Rehabilitation of irrigation facilities	957.8	513.5	320.7	401.3	2,328.4	4,521.7
Expansion of irrigated area	171.2	255.5	369.8	218.4	500.0	1,514.9
River improvements/Flood protection	286.6	431.1	387.9	442.9	450.0	1,998.5
Reclamation of wetlands	199.6	218.6	438.9	191.9	444.2	1,493.2
Total	1,615.2	1,418.7	1,517.3	1,254.5	3,722.6	9,528.3
Development budget allocation						
Rehabilitation of irrigation facilities	50.0	144.0	416.4	261.7	2,287.6	3,159.7
Expansion of irrigated area	25.0	195.7	658.4	417.3	3,112.7	4,409.1
River improvements/Flood protection	-	-	-	329.9	919.7	1,249.6
Reclamation of wetlands	-	-	-	74.8	939.1	1,013.9
Others	39.4	204.9	588.7	3.7	111.8	948.5
Subtotal	114.4	544.6	1,663.5	1,087.4	7,370.9	10,780.8
Recurrent budget allocation	1.4	.70	21.0	48.5	-	77.9
Foreign aid	30.6	151.5	505.6	2,663.0	-	3,350.7
Total (billion rupiah)	146.4	705.1	2,169.1	3,798.9	-	6,819.5
(million US dollars)	364.0	1,624.0	3,175.4	2,725.6	-	7,889.0
Foreign aid dependency (%)	20.9	21.5	23.3	70.1	-	42.5

Source: National Research Institute of Agriculture (1993) Government and Farmers in Irrigation Development in Indonesia, Nogyo Sogo Kenkyu, Vol.47, NO.4,

A. Development Strategies of Natural Resource-Rich Countries

<Breakaway from Mineral Resource Dependent Economy: Malaysia>

(Experience)

In 1984, oil accounted for 22.6% of the total export value of Malaysia's export portfolio. Moreover, exports tended to overemphasize a small number of commodities, especially primary goods³. As a corrective measure, the Fourth Malaysia Plan, launched in 1981, focused on the development of heavy industries. The four pillars of this subsequent industrialization policy were as follows: selected heavy industries, related-parts manufacturing industries, natural resource export substitution industries and labor intensive industries. However, in order to achieve this industrial diversification, Malaysia realized the need to move away from the Bumiputra Policy which had been in place since 1971. This Bumiputra Policy had discouraged both domestic and foreign investment and many Chinese investors were opposed to it. Hence, Malaysia began to implement more flexible measures for investment and with the onset of the 1982 recession, further revised its policies to promote inflows of foreign capital.

The recession from 1982 was triggered by a decline in prices for primary goods. The short-term adjustment policies which were implemented to overcome this economic slump included (1) monetary easing and reconstruction of certain financial institutions, (2) sizable expansion in the provision of low-priced housing, (3) emergency financing for the tin mining industry, and (4) lowering industrial power rates. Medium-to-long-term measures included (1) the Industrialization Master Plan (IMP, 1986-95) produced by the Malaysian Industrial Development Authority (MIDA) and UNIDO in February 1986, and (2) the Fifth

Malaysia Development Plan (1986-90) in March 1986.

The IMP advocated a break from dependency on the exportation of primary goods through outward industrialization, and took the following actions: (1) selected 12 products and product groups on which the government should focus its support based upon resource processing and export potential and also taking into account latent comparative advantages, the importance to the Malaysian people, and export orientation, (2) pointed out constraints in relation to each of these products and product groups and recommended incentive measures, (3) called for the clarification and concretization of measures to attract foreign capital, and (4) recommended that Malaysia relax regulations under the Industrial Adjustment Law, except for the restriction on private sector investment which dates back to the New Economic Policy⁴ of 1971.

Meanwhile, the Fifth Malaysia Development Plan adopted a line of "stable growth" led by the private sector, and called for measures such as: the utilization of domestic capital and easing of regulations on foreign capital, the revitalization of agriculture, and the creation of an enabling environment for industrial development in accordance with the IMP. Additionally, in support of the private sector and local capital, a project to finance Bumiputra small and medium enterprises was implemented and a new investment fund was created.

In addition to these government policies, starting in 1985 robust foreign direct investment, especially from Japanese firms, began to take hold in Malaysia, and new export industries, mainly machinery-related, were born. Initially, however, the relationship between foreign and domestic firms was weak. Also these conditions gave rise to a situation in which Malaysia was relying on foreign imports for most of its capital

3 The value of Malaysia's exports in 1984 rose to 52.1% of GDP (nominal), and primary goods accounted for 68.5% of this, while manufactured goods accounted for the remaining 31.5%. Primary goods were mostly oil (22.6% of the total value of exports), LNG (4.6%), palm oil (11.7%), round timber (7.1%), rubber (9.5%) and tin (3.0%), while manufacturing exports were mostly electronic and electrical equipment (17.5% of total value of exports) and textiles, clothing and footwear (3.0%).

4 To rectify the gap between Malaysia's different races, the New Economic Policy sought to raise the Bumiputra share of corporate stock ownership and established an equity ownership ratio. The NEP targeted a minimum of 30% Bumiputra ownership, a 40% stake for Malaysians of Indian and Chinese ethnic origin and 30% share of foreign ownership. This policy was maintained in the subsequent National Development Plan (NDP, 1991-2000) and National Vision Plan (2001-2010).

goods and parts and intermediate goods used in its industrial products. Meanwhile, Malaysia's exports consisted mostly of primary goods, which in turn deteriorated Malaysia's balance of payments. At the same time because Japanese firms had advanced in Malaysia, due to factors such as (1) the further rise of the yen, (2) skyrocketing wages in Malaysia and (3) rising pressure for local inputs from the Malaysian Government, the development of local supporting industries became necessary.

In response, the Malaysian Government sought to develop supporting industries through the Vendor (local parts suppliers) Development Program. This program had a number of goals. Firstly, it sought to make local Malaysian companies the suppliers and manufacturers of the industrial intermediate goods, machinery and equipment used by large and multi-national companies. Moreover, it aimed to create and strengthen linkages between different size firms and financial institutions. Local large and multi-national companies, referred to as anchor companies, not

only supplied vendor companies with the appropriate machinery and equipment but they also provided economic and managerial advisory services. Later a Tripartite Agreement system was introduced between the Ministry of International Trade and Industry (METI), anchor companies and financial institutions in an attempt to strengthen cooperation between small and medium companies and large or multi-national companies through coordination by METI.

(Lessons learned)

- Clear government policies were key in diversifying the economic structure through export-oriented industrialisation.
- Assigning priority sectors through a set of clear criteria coupled with the deregulation of private sector activity were vital to success.
- The government's role in strengthening the linkages between foreign-affiliated firms and small domestic firms proved critical.

● **Table: Malaysia's Rapidly Increasing Exports**

Code	Average rate of increase (%)	
	1985-1990	1990-1992
012 Lamb, pork, etc. (excluding beef)	122.9	53.1
047 Other cereal meals and flours	27.8	51.8
091 Margarine and shortening	9.4	54.7
122 Tobacco	59.3	114.9
245 Wood charcoal	27.1	58.5
272 Natural fertilizers	6.9	210.0
281 Iron ore	6.8	264.4
335 Residual petroleum products	66.5	44.8
344 Petroleum gases, etc.	-	729.4
513 Carboxylic acids	13.8	112.7
533 Pigments, paints, varnishes, etc.	51.1	48.6
554 Soap, cleansing preparations	39.2	45.6
572 Polymers of styrene	-	81.9
575 Other plastics	-	55.4
625 Tyres	26.1	59.2
656 Tullies, lace, embroidery, ribbons, etc.	79.0	48.5
657 Special yarns, special textile fabrics, etc.	19.8	43.5
659 Floor mats, carpets, etc.	48.0	69.6
662 Clay and tile construction materials	41.4	50.5
672 Ingots of iron or steel	303.6	209.2
678 Wire of iron or steel	-13.3	96.6
679 Tubes or pipes of iron or steel	78.8	98.7
681 Silver, platinum	46.6	91.1
693 Wire products	43.3	90.1
696 Cutlery	38.1	132.5
697 Household equipment of base metal	37.5	40.8
716 Motors	36.7	155.9
731 Lathes, grinding machines, etc.	-	47.0
741 Air-conditioning equipment and parts thereof	46.8	50.6
746 Bearings	-	68.1
749 Non-electric parts of machinery	8.3	42.7
752 Data processing machines	45.1	239.5
759 Office equipment parts and peripheral equipment	99.1	75.3
763 VTRs	121.0	52.1
775 Consumer electronics	19.3	56.4
785 Motor cycles	84.4	99.9
786 Trailers	20.4	47.4
792 Aircraft and parts thereof	-	56.9
813 Lighting fixtures and fittings	-	67.6
821 Furniture	72.7	47.3
831 Trunks, suitcases, bags, etc.	82.1	67.9
873 Meters	23.0	46.9
881 Cameras	41.6	40.4
884 Lenses	50.8	68.7
Total	15.9	14.0

Note: The table extracts from product groups with three-digit classification codes those product groups with an export value in 1992 of 5 million ringgits or more and an average rate of increase during the period from 1990 to 1992 of 40% or more. Product groups with an average rate of increase of more than 90% are indicated by tints.

Source: Kawanabe (1995) Current State and Problems of Development of Supporting Industries in Malaysia – Focusing on the Vendor Development Program, The Waseda Commercial Review No. 325

B. Development Strategies for Natural Resource-Poor Countries

<Promotion of Commercial Agriculture (including Agro-Industry): Thailand>

The strategy that Thailand adopted in the 1980s is typical of a Newly Agro-Industrialising country (NAIC) as described by H. Myint (1965). Underdeveloped countries, in their efforts to transform from primary product exporters to industrial nations, could increase the level of processing and value added to currently exported primary products as an export strategy. This would allow the country to develop without relying on import substitution and export-oriented industrialization.

The NAIC strategy became part of Thailand's Sixth Economic Development Plan (1986-91), and aimed at establishing Thailand as a net exporter of food as a basis for industrialization. It encouraged the development of agro-industry as an export industry based on its past achievements of exporting primary products and for their diversity.

Thailand traditionally produced rice and natural rubber for exportation, but in the 1970s, it diversified its agricultural products to include tapioca and maize. Owing to introduction of modern quality control and production technologies, as well as products requiring labour-intensive processing, the list of export products continued to grow in size and diversity to include broiler, grilled skewered chicken, farmed prawns, tinned tuna, tinned fruit and natural rubber (for seating), all of which produced with sophisticated production methods.

Thailand's expansion of its agro-industry led to the following four outcomes which contributed to the country's industrialization:

- (1) The increase in export volumes and diversity enabled Thailand to overcome limited foreign currency reserves and to purchase the raw materials and machinery necessary for the import substitution of fibre and other products.
- (2) The increase in income of rural communities particularly local merchants and wealthy

farmers created a growing domestic market for the import substitution industry.

- (3) The Rice Premium Policy and other similar export duties contributed to the national government's coffers.
- (4) A new wealthy class of domestic investors and agri-business groups emerged.

Specific support measures adopted by the government for the industry included provisions for preferential investment for the agro-industry and flexible financing for the agriculture-related sectors by commercial banks. However, these policies just expanded on initiatives that had already set in place since the 1970s. Moreover, under the Sixth Economic Development Plan, the government abolished the rice premium, which effectively restricted its intervention in the agri-business.⁵ In this light, it is more appropriate to say that development of the agro-industry in Thailand was rather driven by the private sector than the government as described below.

(1) Farmers were highly adaptable to change.

Farmers in Thailand have traditionally relied on rice production. As the demands of the international market changed, farmers responded by cultivating maize and tapioca. However, this required them to convert upland fields that had until now been rice paddies into upland crop fields. Fortunately, farmers responded aggressively to the transition, enabling an increase in exports which underpinned the country's industrialisation.

(2) Middlemen provided inputs including technical guidance.

In Thailand, middlemen had come to be known to be notorious as exploiters in the distribution of rice. However, to take advantage of the business opportunities they discovered in new crops, their relationship with farmers changed and thus led to their providing technical advice for switching to new crops and leased seeds and agricultural machines to farmers.

(3) Agri-business groups gained power.

Traditionally, integration has defined the agri-business

⁵ One of the reasons why the Rice Premium was abolished is the income disparity. However, an increase in the number of taxable businesses subject to business tax and other taxes caused by industrialization also significantly contributed to the abolition. In 1985, the government set the minimum purchase price of unhulled rice for rice mills, but this system ceased to be functional because of the shortage of subsidies. In other words, in a way, the government's intervention ended up being restrained, rather than being restricted on purpose. Concluded. Suehiro and Yasuda (1987).

in Thailand. Integration means that the entire process from processing and manufacturing to storage and transportation of farm products is integrated and controlled by a single company. In the 1970s to 1980s, these companies grew rapidly as young executives took charge and developed new products and markets. They capitalised on the incentives from the government and financing by commercial banks to make large investments. Moreover, they tested out new steps such as introducing new production systems involving the producers. These systems included contract farming.

Other factors that contributed to the expansion of the agro-industry include: (1) More sophisticated infrastructure, including roads for transport of products and forest clearance; and (2) Integration of near-subsistence farmers into the cash economy as they sought the means to earn cash income.

Meanwhile, adverse outcomes of the NAIC-type industrialisation have also been noted. Foremost is the negative impact on the natural environment, a

classic case being the contamination of rice paddies and the ocean through prawn farming. NAIC-type industrialisation also does not require a build-up in technical capacity as a footing, which enables countries to delay the shift to further industrialization, or catch up. Hence, policy for NAIC-type industrialisation is considered as having an inherent time limit. Finally, to build a highly sophisticated industrial structure, a country may need to experience a transformational process that is different from the one offered by NAIC-type industrialization process.⁶

(Lessons learned)

- The role that the agro-industry, through processing and value addition to agricultural products, can play as a driver to economic growth
- The importance of harnessing private sector dynamism and eliminating any bottlenecks to its development
- Ensuring adequate provision for protecting the environment and selecting an industry for upgrade that has the prospects for being the basis of the nation's further industrialisation or catch up.

● **Table: The Transition of Thailand's Export Amounts by Main Product (1970-95)**

(Unit: 100 million Bt, %)

Products	1970	1980	1985	1990	1995
(1) Farm/Marine Products	9,338	64,737	78,728	132,837	231,417
(%)	63.2	48.6	40.7	22.5	16.5
Rice	2,516	19,508	22,524	27,770	48,627
Natural Rubber	2,232	12,351	13,567	23,557	61,261
Maize	1,969	7,299	7,700	4,144	469
Tapioca Products	1,223	14,887	14,969	24,465	18,253
Frozen Prawns	124	1,965	3,439	20,454	50,302
Frozen Chicken	-	656	1,467	7,590	9,662
(2) Processed Farm/Marine Products	94	6,317	24,384	73,521	132,132
(%)	0.6	4.7	12.6	12.5	9.4
Sugar	94	2,975	6,247	17,694	28,769
Canned Marine Products	-	1,619	5,204	24,762	36,997
Canned Fruit	55	1,723	3,291	5,524	5,754
(3) Industrial Products	145	40,910	66,600	358,879	929,798
(%)	1.0	30.7	34.4	60.8	66.1
Clothes	15	4,913	14,732	65,804	102,019
Jewelry/Ornaments	130	3,240	6,350	34,891	50,864
Integrated Circuit	0	6,156	8,248	21,581	58,182
Footwear	n.a.	358	2,368	20,220	53,931
Plastic Products	n.a.	610	1,262	7,989	63,580
Computer Parts	-	-	n.a.	38,695	131,242
TV/Radio	-	-	96	7,980	31,589
Total Export	14,772	133,197	193,366	589,813	1,406,310

Note: Processed farm/marine products represent the agro-industry.
Source: Suehiro (2000)

⁶ Suehiro (2000).

B. Development Strategies for Natural Resource-Poor Countries

<Investment through Public Development

Banking in East Asia: Japan and South Korea> (Experience)

During the 1960s and 70s, countries in the Far East adopted artificially low-interest-rate policies combined with import-substitution industrialization policies as development strategies for the nation. While in Southeast Asia, market mechanisms were employed and foreign corporations played the important role of coordinator for the financial and real sectors, this was not the case in the Far East. The same role in the Far East was played primarily by the government sector with policy-based financial institutions intervening in the market. These policy-based financial institutions not only provided low-interest-rate loans, but were also instrumental in preventing disorder in the finance sector, which can be common in developing countries due to poor monetary policy. Hence, these Far East governments supported a number of policies to avoid such problems. The government committed resources to investment projects as a measure against financial institutions' weak risk diversification. The market took this move as a tacit signal of a guarantee for a project's success. This demonstration of the government's commitment made it easier to invest in new industries. Moreover, policy-based financial institutions provided the screening services which private financial institutions often lacked. In other words, the government's commitment was understood as justification for investment, and so private financial institutions left screening to the government to avoid problems. So in the end, while the underdeveloped financial sector could not provide adequate long-term funding, government-affiliated financial institutions artificially supplemented the shortage.

In Japan, public development financial institutions were introduced in response to changes during the postwar recovery period in which the country suffered a shortage of domestic savings and an underdeveloped capital market and needed the government to intervene in fund allocation. Japanese

public development financial institutions depended on government fiscal investments and loans as a source of funds. These investments and loans were primarily funded by postal savings and pension premiums. The Japanese public development financial institutions were able to make a significant contribution to the development of selected industries which were central to industrialization. During the social and economic upheavals (e.g. reluctance by banks to lend, earthquakes and oil price hikes), government-affiliated financial institutions offered emergency loans and set credit lines, providing a financial safety net.

Compared to other countries, Japan's policy-based finance was sizable and leaned toward direct finance. Nevertheless, as financial systems became liberalized and private financial institutions grew more capable, excessive public finance began to hinder the efficiency of the capital market and revitalization of the Japanese economy. They also put pressure on financial institutions. Policy-based finance in Japan was not downsized and streamlined in a timely fashion after its roles had diminished.

The financial system in South Korea had long been regulated by the government. In 1961, private banks were nationalized, and the government used commercial banks as a tool to promote its development plans. Between 1973 and 1981, policy-based finance was heavily used, accounting for about 60% of all loans rendered by South Korean savings banks. It bolstered exports and promoted industrialization by funding specific industries at low interest rates. However, the combination of low interest rates and low deposit rates led to a credit crunch. Domestic savings were not adequately allocated for formal financial institutions. And while loans remained accessible to large corporations, including business and financial conglomerates (chaebol), they were not sufficiently available to small and medium enterprises. It became difficult for industries, which were not targeted under this policy, and for small and medium companies to access funds through these formal financial mechanisms. As a result they turned to informal lenders, who charged

high interest rates. This situation also hindered the development of financial institutions' screening and risk management capabilities. As market mechanisms were set aside for policy-based finance, funds were artificially allocated leading to the creation of an environment which allowed for collusive relationships between the government and the business.

In South Korea, the dual structure of low-interest-rate policy-based finance and high-interest-rate private finance remained common for long a time. In 1972 the government finally made efforts to resolve this problem and began to bring informal lenders into the formal financial system. Moreover, in the 1980s, it promoted financial liberalization through

the privatization of city banks and permitted the establishment of joint venture banks. It also promoted integration among financial institutions.

(Lessons learned)

- Low interest financing provided through public development banking proved critical for industrial development in an underdeveloped private financing market.
- Prolonged government intervention proved counterproductive creating a dual financial structure with a funding supply bias and collusion between the government and industry formed in the process.

● **Table: Scale of Policy-Based Finance in Four Advanced Nations (excluding housing)**

	US	UK	Germany	France	Japan
Size of Policy-Based Finance	530 billion dollars	54.1 billion pounds	338.8 billion euro	123.4 billion euro	98.3 trillion yen
Percentage Against Nominal GDP	(5.4%)	(5.7%)	(16.7%)	(8.7%)	(19.1%)
Total Including the Credit Guarantee for Small- and Medium Businesses	564 billion dollars	54.5 billion pounds	343.7 billion euro	128.5 billion euro	139.7 trillion yen
Percentage Against Nominal GDP	(5.7%)	(5.8%)	(17.0%)	(9.1%)	(27.2%)

Note: This table summarizes the credit loan activities that involve the central government. (The data does not include private housing.) The data on Germany include financial institutions at the Province level, which are categorized as Special Banks (policy-based financial institutions). UK's loan indicates the balance at the end of March. UK's credit guarantee for small- and medium companies indicates the balance at the end of March 2001. Both data on Japan indicate the balance at the end of FY2000. The rest of the data indicate the balance at the end of 2000.

Source: Koike, Takuji (2006). "Reform of the Policy-Based Finance—Progress and Issues," Research and Information Vol. 534. National Diet Library

C. Developing a New Comparative Advantage

<Development of the ICT Industry through Higher Education: India> (Experience)

Since introducing economic deregulation policies in 1991, India has achieved remarkable economic growth, recording a GDP growth rate of 9% for 2006. Among industries in India, growth in the IT industry such as software has seen remarkable progress. Taking advantage of the IT boom in the United States, the technical skills of India's IT engineers are now highly valued around the world. Many factors have contributed to the success of India's engineers. As the English language is used as one of the official languages in India, there is a high level of English proficiency within the country, which in turn has facilitated the international success of Indian engineers. Moreover, the presence of numerous internationally recognized higher education and research institutions⁷ for science and technology has yielded great numbers of highly skilled IT engineers in India.

As early as 1970, the Indian government launched efforts at a national level to promote the IT industry in the hopes of stimulating economic growth. It established the Department of Electronics to nurture the software industry, and positioned the software industry as a public works industry.⁸ In 1984, economic policies such as liberalizing the software industry, opening it up to the private sector, and lowering import duties on hardware and software were implemented.⁹ Furthermore, in 1998 the Prime Minister took the initiative of setting up a task force for promoting IT that led to the formulation of multiple action plans. He did so in the hope of turning India into an IT superpower and the largest producing and exporting nation of software. These action plans

sought to develop the human resources needed to foster the IT industry and strengthen IT capacity within the educational systems of the country. Not only were basic steps taken, such as the introduction of computers into schools, but efforts were also made to facilitate the spread of computer education and to leverage IT related education and training in the private sector. The National Institute of IT (NIIT), in actuality a private corporation, has delivered IT education programs for corporate training as well as for the general public. Moreover, the Institute is currently supplementing IT education in public institutions.

Another unique characteristic of the Indian system is that universities as well as other higher education and research institutes generally collaborate with the private sector. They sometimes receive funds and software from these corporations while undertaking research that incorporates certain objectives of these corporations. Moreover, they may collaborate in the development of human resources. For example, at the Indian Institute of Information Technology (IIIT), operational expenses are provided jointly by the government and the private sector. Seeking to facilitate such collaboration, the Centre for Scientific and Industrial Consultancy (CSIC) was established at the IISc in 1975 as a one-stop service center for business-academia collaboration.

(Lessons learned)

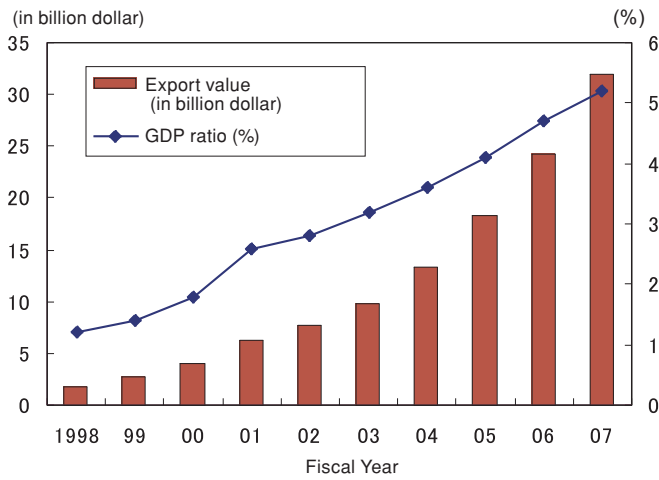
- Clear government strategy and resource allocation, including investments in science and technology and IT education, led to the establishment of an IT nation.
- Co-operation between industry and research and education institutes assisted in spreading IT and developing the appropriate human resources for it.

7 They include the Indian Institute of Technology (IIT), The Indian Institute of Science (IISc), The Indian Institute of Information Technology (IIIT) and the Centre for Development of Advanced Computing (C-DAC). Indian universities include so-called quasi-universities, which are research institutes not subject to federal or state law. By receiving accreditation as a quasi-university, it is possible to confer degrees, and to receive federal subsidies, as do national and state universities.

8 The Department of Electronics was upgraded to the IT Ministry in 1999. It is currently positioned as a ministry responsible for important national industries and is actively promoting the IT industry.

9 For information on the initiatives of the Indian government in the IT industry, refer to "The IT Revolution in Asia" (2001) by the Sanwa Research Institute.

● **Trends in the IT and IT Service Industry in India (Share of GDP and Exports)**



Source: NASSCOM

● **Changes in Software Policy: Indian Government, Karnataka State, Bangalore City**

Government of India	Karnataka State	City of Bangalore
Republic of India (1950)	IISc established (1909)	
DoE established	1970	
Centre established	1975	
	1980	★ Wipro Infotech Group established
	1981	★ Infosys Technologies established
	1986	★ US Texas Instruments
	1988	Management company of Software Technology Park established
Economic deregulation	1991	↓
	1992	Tech Park conceived (with Prime Minister Goh Chok Tong) →
		↓
		Tech Park Company
		↓
		↓
Rapid economic growth	1994	Management company of International Technology Park established
IT taskforce	1998	ITP created
IT Ministry established	1999	STPI opens (currently 39 locations)
		★ Infosys Technologies listed on the US stock exchange
	2000	ITPL opens
	2000	The state government sponsors a global investors conference
		↓
		IT integrated network (Bangalore, Mysore)
	2010	The Millennium IT Policy
	2010	The Millennium Biotech Policy

Source: Yoshikazu Fukushima. Facts and Issues in the IT Industry in India: The City of Bangalore. Center for Urban and Regional Policy Studies Collected Papers No. 2, March 2006

C. Developing a New Comparative Advantage

<Investment Climate Development through the Establishment of Special Economic Zones: China, Thailand and the Philippines>

(Experience)

【China】

In 1979 China established four Special Economic Zones (SEZ) in Shenzhen and later elsewhere as part of Deng Xiaoping's program of reform and openness. These economic zones in China have been recognized as successful in that they have promoted overseas direct investment, impacted job creation and expanded exports. These SEZ strive to bring in foreign capital, production modes, and business skills, and have created an economic system which is better aligned with international standards. Moreover, the SEZ have been commended as a model for the positive effects of promoting policies of economic reform and openness. Finally, they demonstrate the ability of market economic policy to penetrate into the country as a whole.

An important feature of the SEZ in China is the incentive packages which they include. Originally such incentives were developed for the export processing zones of the manufacturing industry. These incentives include corporate tax reductions or exemptions. They also include exemptions from customs duty, land-use fees, capital mobility and allow exemptions for the employment of foreigners. By the 1980's these SEZ held an increasingly important role as they assisted in achieving comprehensive development which included tertiary industry. In terms of scale and integrity, they were different from their predecessors, the Export Processing Zones (EPZ) of South Korea and Taiwan, with features that included well-organized infrastructure such as seaports, airports and telecommunication facilities, wide industrial coverage (i.e. agriculture, tourism, commerce), and linkages with domestic industries. In terms of administrative control, these SEZ had a less centralized control system. Administration, authority over infrastructure, and to some degree the approval of investment matters, were delegated to the provincial government. Moreover, a greater part of the tax revenues stayed with the province.

【Thailand】

The Eastern Seaboard Development Plan is a leading large-scale industrial development scheme that the Thai government implemented in the 1980s with assistance from Japan and the World Bank. It has a twofold purpose of 1) boosting international competitive strength and inviting direct overseas investment in export-oriented industrial fields, and 2) easing the over-concentration of economic activity to Bangkok.

The large-scale project which extends over three provinces in the coastal area southeast of Bangkok consists of a composite industrial site formed by two deep seaports, Leam Chabang and Map Ta Phut, supported by harbors, roads, railways, dams, service pipelines and other facilities. The Leam Chabang industrial complex was planned for labor-intensive, export-oriented industries while Map Ta Phut was planned as a site for heavy chemical industry that uses the natural gas produced in the Gulf of Siam. The basic plan, on which work had started in the 1970s, was consolidated and publicly announced in 1982, but due to the subsequent slump in the Thai economy, it was essentially put on hold until construction finally got underway in 1986.

The impact of the Eastern Seaboard Development Plan on the society and economy of Thailand is outlined below.

(Leam Chabang)

At first, Leam Chabang was planned as an export location for light industry, such as apparel and shoes, and for small and medium-sized corporations. However, after completion, the site functioned as a base for the machinery industry (general and electronic machinery in its early stage but transportation equipment afterward), and a wide spectrum of companies from major multi-national corporations to small-scale vendors were concentrated here. This was probably the result of the large-scale development in the area which facilitated a combination of synergistic production and product shipment. Capacity was saturated as early as the mid-1990s with new investment expanding to outlying areas and the adjacent province (Rayong province

where Map Ta Phut is located).

(Map Ta Phut)

The construction of the harbor at Map Ta Phut coincided with the development of the petrochemical industries that use natural gas and, as a result, the petrochemical industry became the core sector of this industrial site by the first half of the 1990s. However, since the fertilizer plants initially planned were never built, the petrochemical industry expanded mainly in response to domestic demand with the growth and expansion of related industries being limited. As a result, some critics said that the construction of a large-scale port infrastructure was disproportionate to the domestic petrochemical industry, but by the latter half of the 1990s, the area absorbed investment overflowing from the Leam Chabang zone, which had become unexpectedly congested. Today, the two zones have been integrated and function as an export base for machinery and supporting industries.

The reasons behind the success of the Thai government plans for the Eastern Seaboard Development are 1) the consistent skill level of the technocrats and their independence from politics; 2) the unique checks and balances structure in Thailand (several players sharing influence meant that mutual checks were continuous); 3) the development-centered orientation of the Prem administration and, 4) 'the unintended transparent and open political process' created by the intervention of the media.

【The Philippines】

In the Philippines, it all started with the construction of a large-scale export processing zone at Bataan in the central Luzon region in 1969, and by the mid-1980s, the government (the Export Processing Zone Authority or EPZA) had constructed four export processing zones (Mactan at Cebu, Baguio north of Manila, and Cavite, a suburb of Manila). The construction and operation of the export zones were driven by the government. Since priority was given to issues that concerned the government at the time, such as avoiding over-concentration in Manila

and developing the regions out of political concerns, there were, to begin with, problems with site selection which, combined with several other factors (a poor investment climate, weak sales promotion, bureaucratic and complicated customs procedures, lack of funding, and overemphasis on assembly industry), caused the Philippine government itself to later sum up the result as 'not very successful.'

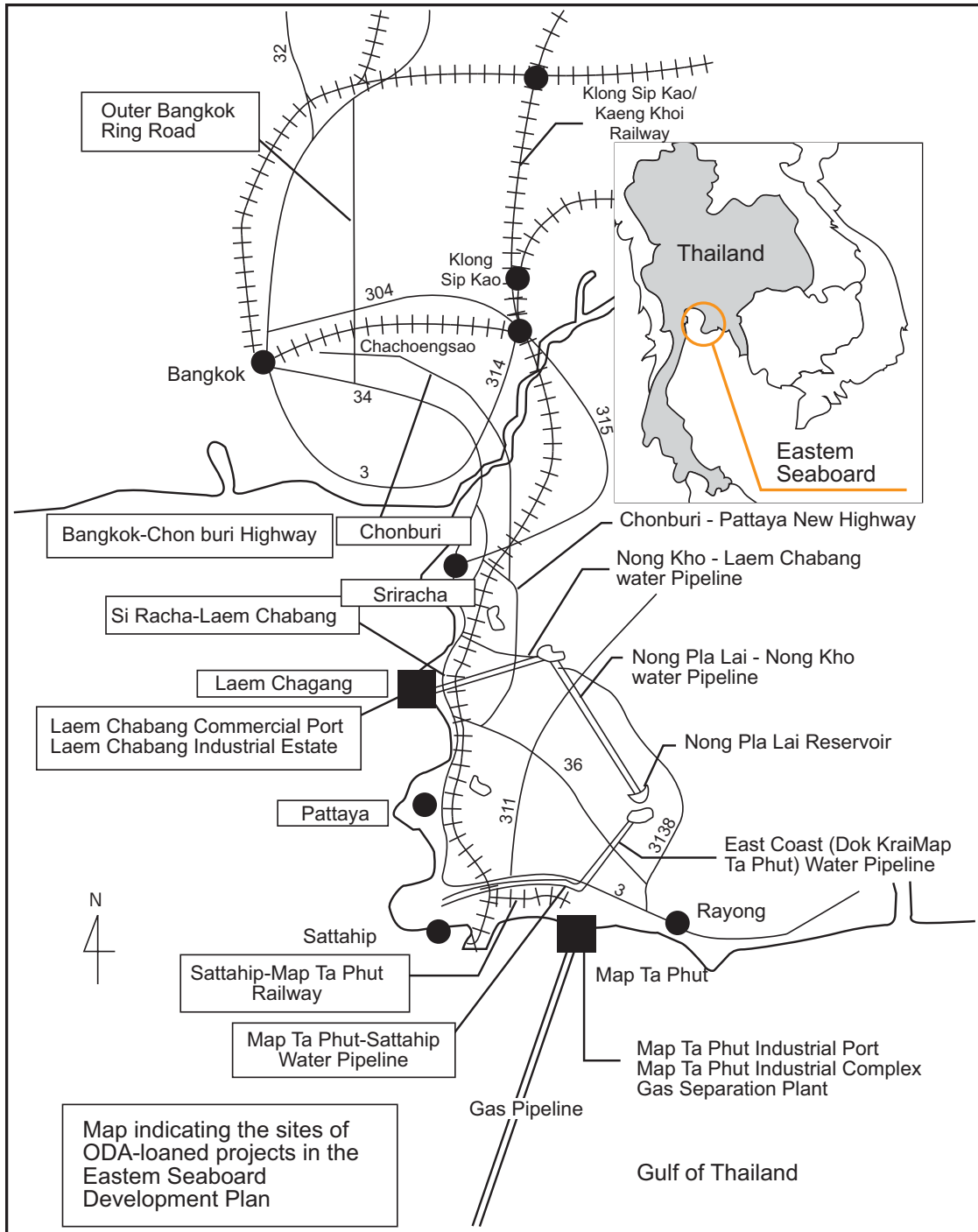
However, in 1995 the EPZA was reorganized as the Philippine Economic Zone Authority (PEZA) and was transformed into a stronger organization with functions that included overall policy for the economic zones and investment promotion. The export processing zones which had attracted investment were turned into economic zones (Ecozone), not only for the manufacturing industry, but it became possible to invest in complex industries such as exports of computer software and other IT services and tourism. In addition, policy was changed to make it possible to grant incentives to developers of the zones. That is, the government simplified and clarified the procedures for permits and licenses and concentrated on promoting the special zones, and roles were changed to allow the private sector or public-private partnerships to develop industrial sites and some of the utilities. As a result, the PEZA has greatly increased the share of economic activity and employment at the Ecozones under its control,¹⁰ and is continuing to integrate industries such as electronic components and electrical appliances.

(Lessons learned)

- The benefits of using of special economic zones as a testing ground for investment climate development.
- The benefits of a comprehensive approach towards concentrated infrastructure development, information, institutions and human resource development aspects at the initial stages.
- The importance of actively engaging private-sector capability in managing special economic zones.

¹⁰ In 1994, they accounted for 22% of manufacturing industry exports, but by 2003 the figure had increased to 76%. In 1994, employment figures were 229,000 but by 2003 they had reached 907,000.

• Locations of ODA Loan Projects in Eastern Seaboard Development Plan



Source: JBIC(1999), "Eastern Seaboard Development Plan Impact Evaluation"

C. Developing a New Comparative Advantage

<Strategic Human Resource Development and Support for Overseas Employment: The Philippines>

(Experience)

The Philippines' experience illustrates a successful example of service-led growth. While the ASEAN economies saw rapid economic growth from 1980s onward, the Philippines fell behind more advanced members (namely Indonesia, Malaysia, Singapore and Thailand) in growth rates, infrastructure, and its macroeconomic management. These conditions discouraged foreign investors. As a result the level of FDI inflows and industrialization lagged behind other economies in the region throughout the 1980s.

Subsequently reform efforts and improved electricity supply materialized. Stable economic growth, at 4-7 % in recent years, has been achieved largely due to the growth of the service sector (e.g. financial, retail and personal services), which accounts for about half of overall growth. In fact the economic structure of the country is shifting. The service sector's share increased from 44 to 54 % in the past 15 years, while agriculture sector shrank relatively.

This growth was a result of the inflows of foreign capital into the financial sector and ICT services (e.g. business process outsourcing, software programming). For example, IBM outsources back-office operations and DELL has recently opened a large-scale call centre. Such projects are possible due to the English speaking capabilities of many people within the country.

One of the most prominent characteristics of the economy itself is its reliance on remittances from abroad. Although the country's trade balance in goods and services persistently runs a deficit, current transfers (i.e. remittances) cancel out the deficit and since 2003 have actually created a surplus. These remittances allow the expansion of retail and personal services sectors through consumption and investment.

Additionally, the recent trend of newly hired Overseas Workers, (OWs) shows that, although traditional production labour and housekeeping account for a large part of the OWs, there is an increasingly

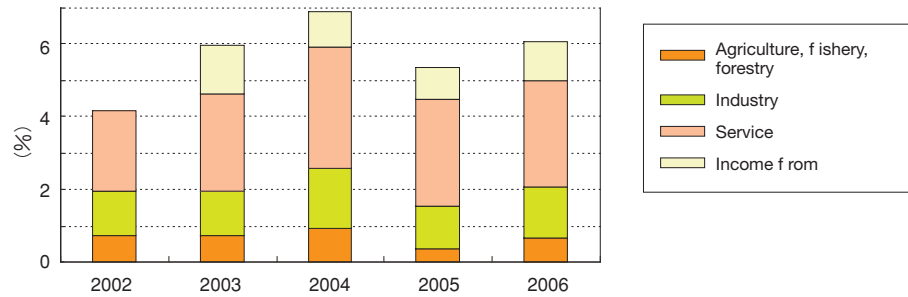
important number of nurses and caretakers (those who provide care for children, elderly persons or persons with disabilities in private homes). The number and share of total nurses has more than doubled in the last 15 years, and the hiring of caretakers (4.7 %) dramatically increased during the same period. The Filipino Government considers the role of overseas workers as an important component in their national strategy. In 1982, it established the Philippine Overseas Employment Administration (POEA) to regulate and promote the hiring of Filipino workers overseas, to guard the welfare of OWs, and to recruit and coordinate the hiring of professional/skilled workers with receiving countries under bilateral agreements. As many Filipino nurses and caretakers have the advantage of an American style nursing education and are often proficient in English, a priority of the government has been to facilitate the process for these workers to be hired overseas. For example, the government has promoted overseas hiring through the establishment of bilateral G-G programs for caretakers.

The Philippines' economic growth strategy is increasingly dependent on human resources through its export of services, i.e. business outsourcing and skilled professionals. Although it is an island, the economic development is no longer dependent on these geographical conditions. Though its domestic infrastructure may be less developed than that of its neighboring countries, the Filipino government has found a way to pursue economic success through taking advantage of the resources which it does have.

(Lessons learned)

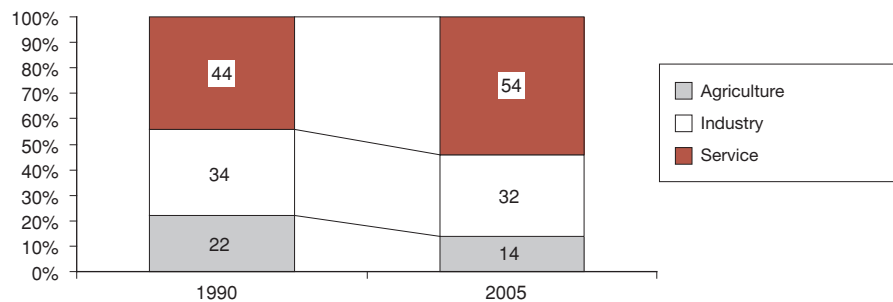
- Recognition of remittances as an important source of capital inflow.
- Identification and fostering of marketable human resources has served as a comparative advantage, in this case English speakers trained in an education system compatible with that in the Western countries.
- Specialised and skilled labour that is in demand overseas was strategically promoted.
- The formation of a development strategy was unconstrained by geographical conditions, at least in the short to mid term.

● **GNP Growth and Contribution by Sector**



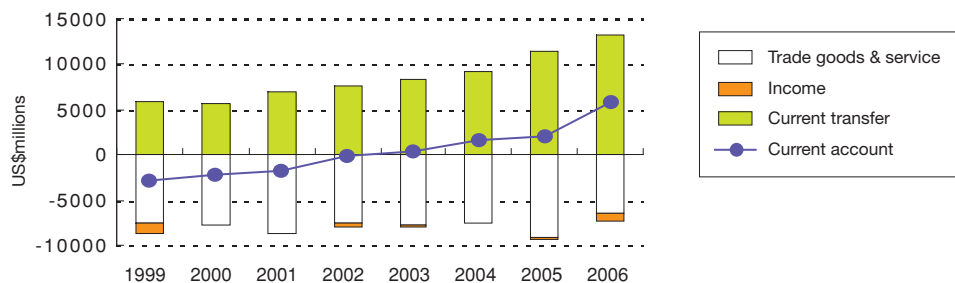
Source : Central Bank of Philippines

● **Transformed Structure of Economy**



Source: World Development Indicators

● **Balance of Payment**



Source: Central Bank of Philippines

● **Overseas Workers (New Hires) by Occupation**

	Number	Share (%)
Administrative, manager	817	0.3
Agriculture, forestry, fisherman	807	0.3
Clerical workers	7,912	2.6
Production, transport operator	103,584	33.6
Professional, technical	41,258	13.4
o/w Nurses	13,525	4.4
o/w Medical dental veterinary	1,038	0.3
Sales worker	5,517	1.8
Service worker	144,321	46.8
o/w Domestic helper, household	91,412	30.0
o/w Care taker	14,412	4.7
TOTAL	308,122	100.0

Source: Overseas Employment Statistics, POEA

C. Developing a New Comparative Advantage

<Establishment of a Development Corridor:

Mekong Basin Development>

(Experience)

The New Partnership for Africa's Development (NEPAD), an organization created with the support of various African countries, promotes regional integration as one of its top priorities. To do so, the organization endorses pursuing the development of indispensable regional infrastructure such as regional hubs, development corridors and poles, as well as emphasizing linkages with mining, agriculture, tourism and other economic activities. The Maputo Corridor linking South Africa and Mozambique is a primary example of a successful development corridor, and is currently being studied in order to apply lessons learnt to similar development corridors across Africa.

The Mekong regional development initiative is a similar project in the Asian region. The framework for development in the Mekong region has a long history with earliest efforts going back as far as 1951. It was at this time that the Economic Commission for Asia and the Far East (ECAFE) carried out surveys for developing the Mekong river basin. However, what is perhaps most relevant to the 'development corridors' in Africa is the Greater Mekong Sub-region Development Program which was launched by the Asian Development Bank (ADB) in 1992. Six countries in the Mekong region (Thailand, Viet Nam, Laos, Cambodia, China, Myanmar) participated. Meanwhile, the ADB secretariat functioned as an intermediary between the member countries and donors while simultaneously coordinating eleven programs including economic development corridors in the North-South, the East-West and the Southern area of the region. These programs covered nine priority areas: 1) traffic and transportation; 2) energy, 3) communication; 4) tourism; 5) environment; 6) human resource development; 7) trade; 8) investment and 9) agriculture.

The aim of this economic development corridor was to implement poverty reduction and economic growth by creating a belt that would link impoverished inland areas with port cities which have access to world markets. Moreover, electricity and communication infrastructure was developed in parallel with roads, bridges and other transport infrastructure. Linkages with agriculture, mining resources and tourism were also created based upon this infrastructure. Plans to establish free trade zones in the border areas and to build industrial parks were also formulated.¹¹ As the success or failure of the GMS corridor depended on collaboration between governments and the private sector, the GMS Business Forum took a number of steps to facilitate this collaboration. It sponsored workshops for the private sector in all member countries, nurtured the development of regional resources and processing industries in all countries along the corridor, and proposed private investment in order to form industrial clusters at locations along the corridor.

The approach of proactively involving the private sector is a unique feature of the GMS program.¹² The idea is that the private sector can play a decisive role as the main engine for growth in the region. Private sector investment in infrastructure projects implemented under such a program create business opportunities for the private sector itself, particularly in the fields of communications and energy, that far outweigh the amounts it invests, thus acting as an incentive. On the other hand, the introduction of new ideas, technologies and management by private corporations contribute to capacity building in the region. It is also important to note that the GMS program was not originally launched by drafting and finalizing multilateral cooperative agreements. Rather it was based on a results oriented approach and focused on the cooperation already established by bilateral agreements in areas where something could realistically be achieved. As both parties benefited, the framework was gradually expanded to other

¹¹ The border economic zones of Chiang Rai, Mukdahan-Savannakhet, Trat-Koh Kong and Myanmar; each one includes plans for constructing industrial parks. Also incorporated in the Thai regional economic development plans.

¹² In 1999, when the GMS investment group was established, GMS investment opportunities were advertised in Japan and Europe; in 2000, the GMS Business Forum was established with a membership of chambers of commerce in the six countries in the Mekong region, strengthening networks with private business, promoting trade with private investors inside and outside the region, conducting consultations about policy issues in order to mobilize private-sector initiatives, and striving for proactive collaboration between the chambers of commerce in each country.

countries and built upon the principle of comparative advantages. Such flexible pragmatism was a principle factor behind the comprehensive and synthetic GMS framework in the Mekong area development.

Furthermore, one must not overlook the coordinating function fulfilled by the ADB secretariat. The GMS program consisted of four levels: the GMS summit where the heads of state of the six member countries and the president of the ADB participate, a ministerial-level conference, sector-specific working groups of high-level strategists, and specialist working groups for each sector. Through technical cooperation, the ADB secretariat provided planning support, coordinating functions, and financial and business support to all four levels. In addition, a

GMS unit was established within the ADB (later reorganized as the Mekong Department). In response, each country appointed a Minister to this unit. Also a ministerial steering committee was set up and a GMS coordinator was appointed as an advisor. As a result, the GMS program was administered as one complete organizational entity.

(Lessons learned)

- The need for public-private partnership and an emphasis on a realistic approaches in the development of a developmental corridor.
- Overall co-ordination, technical assistance and project finance provided by regional development financial institutions proved vital.

APPENDIX-3
Examples of Japan's Past and
On-going Interventions in Africa and Asia

3-1:

Formulating Industrialization Strategies based on the Asian Experience: Investment Climate Development in Zambia; Economic Policy Formulation in Vietnam; and Tripartite Co-operation Among Japan, Vietnam and Mozambique

Investment Climate Development in Zambia

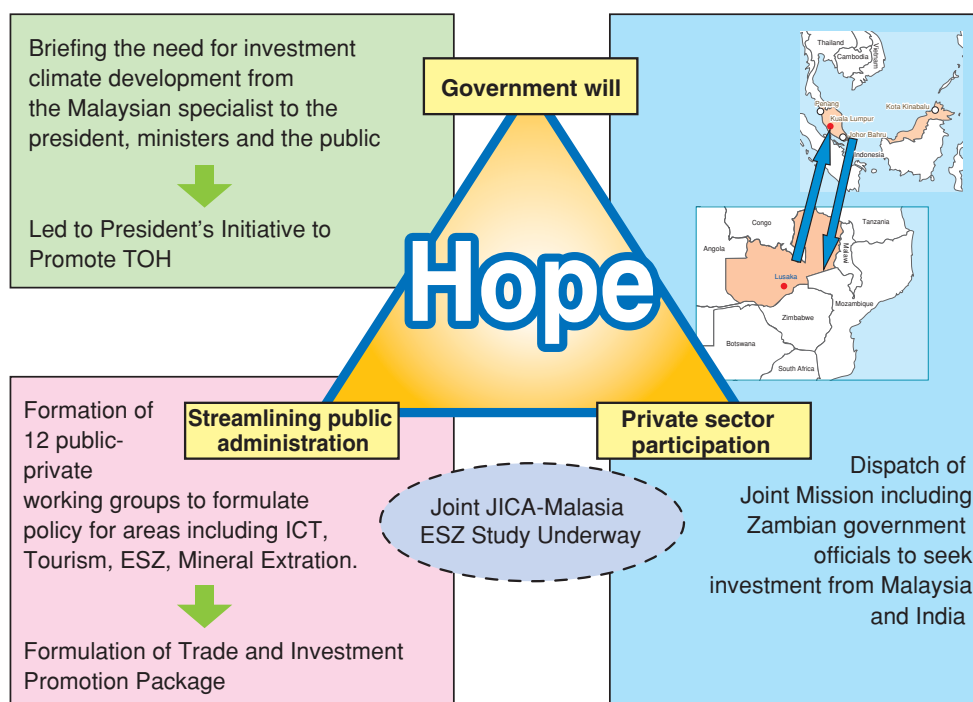
While Zambia's recent rapid economic growth has benefited from the brisk price of copper, the country's primary export, the government recognizes the need to diversify its economic structure to overcome its dependence on this single source of revenue. At the same time, the country's long-term planning instrument, Vision 2030, sets the objective of achieving "middle-income country" status by 2030, and the Fifth National Development Plan (FNDP2006-2010) seeks to accomplish economic growth and poverty reduction simultaneously by 'creating broad-based wealth and employment through public participation and technological development'.

In support of the Zambian government's policies for economic diversification and pro-poor growth, JICA provided assistance for investment promotion through a two-pronged approach consisting of policy advice to strengthen the investment climate and creating linkages with Asian investors based on its experience working with Asian partners. Firstly, through its south-south co-operation mechanism, JICA sponsored the former vice president of the Malaysian Industrial Development Authority (MIDA) to advise the Zambian president and relevant ministers on industrialisation promotion strategies. These strategies were subsequently adopted as national policies through cabinet approval becoming to be known as 'The Triangle of Hope (TOH)'. The title of the project indicates the importance assigned to the collaborative efforts of the government (political leaders), bureaucracy and the private sector to forge a positive investment climate for FDIs. Under the TOH, working groups representing both the public and private sector were established to develop specific policy proposals for twelve selected areas: agriculture, cotton, mineral extraction, health and medical

services, telecommunications technology, tourism, education, multi-facility economic zone development, SMME promotion, air and land transport hub development, streamlining administrative procedures and finance. Of these selected areas, Japan is currently undertaking a feasibility study to establish a multi-facility economic zone in co-operation with Kulim High-Tech Park of Malaysia, which itself was developed with support from Japan in the past.

Secondly, in a bid to assist Zambia in attracting investment from India and Malaysia, and to strengthen capacities related to gathering and sharing of investment-related information, JICA undertook a number of specific activities to support Zambia. First of all, it arranged for a delegation of Zambian government officials to visit Malaysia (2006) and India (2007), as well as sponsored a business forum in Zambia itself to attract Asian firms to invest in the country. These efforts led to agreements with Malaysian firms to establish joint ventures for a mobile-phone factory, a telecommunications technology college and a PR company, and in the case of India, the development of a specialized hospital and the a technical university represent two specific outcomes.

[Triangle of Hope: Creating the Optimal Conditions for Investment]



Economic Policy Formulation in Vietnam

In the early 1990s, as Vietnam took positive steps to rejoin the international community and rebuild a market-based economy, Japan provided substantial amount of its development assistance to Vietnam in such a way as to underpin and spur growing private investment in the country. Most of its ODA focused on infrastructure for roads, railways, hydro-electric power generation and telecommunications; however, through technical assistance JICA offered valuable assistance for economic policy formulation.

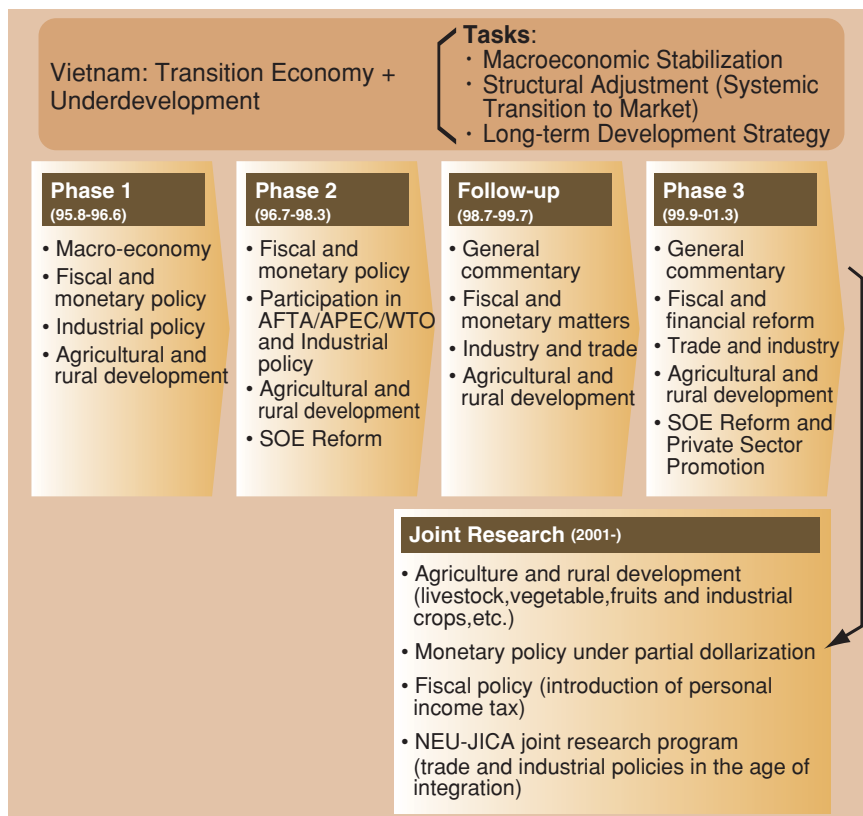
Here, the "Ishikawa Project," named after an emeritus professor of Hitotsubashi University, Shigeru Ishikawa, played a central role. Over a five-year period from 1995 to 2000, a group of 20 academics led by the professor worked closely with the Vietnamese government to design and develop proposals for the national economic policy. The group's

recommendations had an enormous impact on the 'Five-Year Plan for Socio-Economic Development 2001-2005', which emphasised, among others, the importance of; domestic as well as foreign capital mobilisation; rural and agricultural development alongside industrialisation; and fostering the growth of SMMEs as well as heavy industry.

The resounding success of this collaborative activity later led to the birth of the "Vietnam-Japan Joint Initiative" (for investment climate improvement) and cemented a relationship with Vietnam and Japan's continuous support for infrastructure and investment climate development.

Neighbouring countries in South East Asia recognising the achievements of this partnership have requested similar economic policy support from Japan. To date this approach has been adapted to the needs of Indonesia, Laos, Myanmar and Cambodia.

● Overview of Japanese Assistance for Economic Policy Formulation for Vietnam



Japan-Vietnam-Mozambique Tripartite Co-operation

Tripartite co-operation involving Japan, Vietnam and Mozambique took shape between 2006 and 2007. During that time Mozambique's President Guebuza and Aiuba Cuereneia, the Minister of Planning and Development, visited Japan and Vietnam to deepen co-operation and to promote a tripartite partnership. At the same time, Vietnam's head of the state, while on a visit to Japan, issued a statement calling on the Asian region to leverage its own experience of economic development in its assistance to Africa, and expressed particular interest in working alongside Japan and Mozambique.

Since that time the Japan Bank for International Co-operation (JBIC) has come to play the role of liaison between Mozambique and Vietnam. In Vietnam, JBIC is financing the renovation of the Da Nang port and the construction of the Second

Mekong International Bridge both of which are part of the East-West corridor, stretching from Da Nang to Myanmar through Laos and Thailand, a plan which has been promoted since mid 1990s. In southern Africa, JICA extended technical assistance for a similar endeavour in Mozambique, which is planning the construction of a corridor linking itself with Malawi and Zambia from the northern port of Nacala.

The Vietnamese government hosted 'East-West Corridor Week' in 2007, to disseminate its achievements and share lessons learnt in developing international corridors with stakeholders from relevant countries' governments, donors and the private sector. JBIC invited government officials from Mozambique to take part in this event to allow people related to Nacala corridor development to share lessons learned with the Vietnamese side.

This exchange between Vietnam and Mozambique led to a joint seminar with Mozambique on industrial

development in February of the following year inviting this time officials from Vietnamese government and attended also by respected Japanese scholars on the Asian economy development. Participants discussed the economic development experience of Vietnam and other Asian countries, including the export strategies that had been adopted and the contribution that industrial clusters such as special economic zones or industrial complexes had made,

and discussed possible strategies for industrialisation suited to the context of Mozambique.

Following the seminar President Guebuza and Minister Cuereneia both expressed appreciation for the cooperation from Japan and Vietnam and the hope that the tripartite ties would strengthen. JBIC is currently examining how Japan could extend further this tripartite partnership.

3-2:

Building Production Capacity and Markets for Exports: Shea Butter from Ghana and the Kenya Export Promotion Council

Shea Butter from Ghana

Shea nuts, the source of a rich and high-quality emollient, are native to the savannas of North-western Africa. Growing demand from the cosmetics industry offers the cash-strapped North a chance to develop an export from this natural West African beauty treatment. Low yields and production capacity, however, are proving to be a challenge. Working at different levels and adopting several approaches Japan has offered assistance to build both production capacity and a market for shea butter exports.

Since 2000, with a view to improving rural livelihoods and welfare at the grassroots level, JICA has extended assistance through local NGOs to shea butter producers in three northern states of Ghana. Targeting 210 members of 30 women's groups, JICA opened training centres that offer technical guidance to enhance traditional practices for processing the butter. These centres not only offer advice on how to improve quality but also offer training in book-keeping, business management and marketing skills. To reinforce these efforts, JICA has stationed trained Japan Overseas Cooperation Volunteers (JOCV) with producer women's groups, and helped them with shea butter soap making but to find market outlets for their products in local hotels and university souvenir shops in Accra. In 2004 members of two women's groups in the north were able to attend training in

enhanced production techniques and the groups themselves were provided with processing facilities offered by an international NGO.

This support enabled some of the women's groups to develop export quality products, culminating into forming a supply contract with a British cosmetic company as well as a Japanese natural cosmetic company via the Japan External Trade Organization (JETRO). To further these efforts, JETRO established a model workshop for shea butter soap making, which was joined by JICA with additional APPENDIX of volunteers, to ensure even higher-quality production for export to Japan.

At the national level, JICA continues its support to build on these achievements through support it has given Ghana in developing a master plan to invigorate local industry in the North. Based on the plan, in the spring of 2007 the Japan/UNDP Women in Development Fund began a two-year project to expand shea soap based income generation activities across the region. JICA's role in this activity, in association with UNDP, Africa 2000 Network and AFRASIA Business Council (AABC), will be to mainstream a standard production process for shea butter, assist the women's groups to organise, bolster their business capabilities and support domestic and international marketing efforts.



Village women carrying shea butter

The Kenya Export Promotion Council

Promotion of export is among the main pillars of the Kenyan government's development strategy, which is expected to contribute to employment creation and foreign currency earning. Export promotion is definitely a high priority strategy under the current national development plan called 'Economic Recovery Strategy (ERS)'.

While in the past Kenya relied on traditional exports such as tea, coffee, petroleum products and cement, it has recently begun expansion into non-traditional industries such as commercial vessels and assembled automobiles. The diversification of exports is an indispensable tool for trade promotion, and the government of Kenya is aware of the importance of selecting export products reflecting consumer preference and demand of the market.

By now, the Kenyan government has advanced various measures meant for export promotion, including establishment of economic processing zones (EPZs), and a partial reduction in sales taxes for the manufacturing industry, as well as liberalization of export and foreign exchange. However, previous attempts have not necessarily met expectations, as the country needs to address various other factors hindering export, such as inadequate infrastructure,

increased crime, the spread of contraband and rising trade costs due to corruption.

In an effort to assist Kenya in attaining its goals, JICA conducted an 'Export Promotion Master Plan Study' in 1991, which came up with specific recommendations for export promotion. Master Plan recommendations led to the establishment of Export Promotion Council (EPC) by the Kenyan government, to which JICA provided technical assistance, including the dispatch of three Japanese experts from 1993-2002, who offered advice regarding business skills training for trade and export product development.

More recently in 2007, JICA, in view of the increased need for strengthening human resource capacity amid the enhanced calls for export promotion, began the implementation of a project for capacity building of small-scale exporters. This project was designed to strengthen the trade-related business skills required for Kenyan exporters as well as staff of the EPC. This project is expected to contribute to the long-term goal of establishing Kenya as an economic hub for surrounding countries and the creation of a strong export-oriented economic structure.

3-3:**Promoting Science and Technology Education: Rwanda**

Rwanda is a landlocked country that not only lacks natural resources but human resources, as the country has been unable to recover from the loss of a great number of its population since the genocide of 1994. Particularly in need of technical manpower including engineers and technicians, Rwanda must rely on attracting professionals from abroad, particularly from its neighbours.

Aware that the country must invest to fulfil its own needs, the Rwandan government has made building scientific and technological prowess the nation's first priority of development and has been proactive in promoting science and technology education, including ICT, at all levels from primary education to higher and vocational training.

Against this background, Japan has assisted the government of Rwanda in developing the country's technology education policies, and supporting the strengthening of science and technology education,

thereby contributing to the country's strategy to bolster 'science and technology human resources'. An example of Japan's assistance includes a project to restore a technical education institute called 'the Tumba College of Technology', which had initially been established with Japanese assistance but later destroyed during the civil war and had subsequently been used as a junior high school. The aim of the project is to transform the school into a diploma awarding technical education institute for advanced technology focusing on information engineering, telecommunications engineering and alternative energy. JICA's approach includes leveraging the know how and resources that had been developed from similar assistance to technical education institutes in Nepal, Myanmar and Indonesia to enhance the college's management capability, curriculum development, quality of instruction and educational facilities and equipment.



The Tumba college of Technology



Students in IT class

3-4:

Strengthening Vocational Education and Training: The Japan-Senegal Vocational Training Centre and Nakawa Vocational Training Institute in Uganda

Through its assistance in founding vocational training centres in Senegal and Uganda, Japanese assistance has been instrumental in these countries' efforts to deepen the pool of human resources they have to fuel industrial development. At the same time, the reputation that these centres have acquired for excellence have led to their offering of training opportunities to neighbouring countries thus spreading the benefit of Japanese assistance around the region and the continent.

The Japan-Senegal Vocational Training Centre

The foundation of the Japan-Senegal Vocational Training Centre in 1984 led to a revolution in the quality of skills training in Senegal. Since its establishment it has grown to become the country's top vocational training institute for intermediate skills training with an average of 80 percent of its students finding employment upon graduation. In particular demand is the automatic control course which is proving popular among applicants in surrounding countries, too. Responding to this demand from home and abroad the institute has expanded its

role in recent years. By now, it has established itself as an institute where high-school graduates can gain higher-level engineering credentials. Moreover, by offering training throughout Francophone Africa, it has also contributed to spread of trained intermediate-level engineers in the region and bolstered the technical and management skills of the vocational institutes in neighbouring countries. To enhance this effect and further collaboration, the centre has dispatched its instructors to an institute in neighbouring Mali.



Japan-Senegal Vocational Training Centre

Nakawa Vocational Training Institute in Uganda

The Nakawa Vocational Training Institute in Uganda has an excellent reputation. Founded in 1968 with assistance from Japan, the institute overcame its temporary closure during the civil war to reopen in 1997 and become the country's best vocational institute. It boasts a 90-percent employment rate among its graduates and consistently achieves the top passing rate for the national qualification exams among schools nationwide.

Like the Japan-Senegal Vocational Institute, Nakawa institute has also been active in spreading the benefits of the co-operation it has enjoyed to similar institutes on the continent, particularly in the south eastern Africa. Already it has received acclaim both at home and in the region for its co-operation in projects in Sudan and Eritrea as well as for conducting in-service training for the private sector.



the Nakawa Vocational Training Institute



A class in the automobile department

3-5:

Regional Network Building among Further Education Institutes: African Institute of Capacity Development (AICAD); ASEAN University Network/ Southeast Asia Engineering Education Network (AUN/SEED-Net)

Enhancing the functions of further education institutes can be extremely time-consuming and costly compared to basic education. Hence, it is critical to facilitate the creation of networks among existing institutions of the same level for information and resource sharing, as well as to collaborate on activities and studies whenever possible. These approaches are effective tools in reducing the differences which may exist between universities and to improve overall education levels.

African Institute of Capacity Development (AICAD)

Japan's assistance to further education institutes in Kenya started in the late 1970s, when it provided support to the Jomo Kenyatta University of Agriculture and Technology (JKUAT) for building its institutional and educational capacity. In 2000, building on the achievement with JKUAT, Japan, through JICA, established a regional educational institute called "the African Institute for Capacity Development (AICAD)" in Nairobi with 15 universities from Kenya, Tanzania and Uganda participating. Main activities of the institute include; promotion of practical research activities useful for poverty reduction via provision of

research fund and facilitating joint research among the participating universities; provision of training opportunities inside and outside the three countries using achievement from the R&D activities; and development of academic database based on the research outputs obtained through the projects.

The AICAD project has since developed new knowledge and technologies in areas such as establishing locally adapted cash crops for the region, improved processing technology of agricultural products, and the innovative construction of low-cost housing, among others. These advancements are directly linked to poverty reduction, and through training opportunities offered and the use of a development-related database, sharing of these ideas are actively pursued.

ASEAN University Network/ Southeast Asia Engineering Education Network (AUN/SEED-Net)

In Asia, JICA has also implemented the South East Asia Engineering Education Development Network (SEED - Net) project involving 19 universities from 10 different ASEAN countries. SEED-Net targets science and engineering programmes and faculties of these

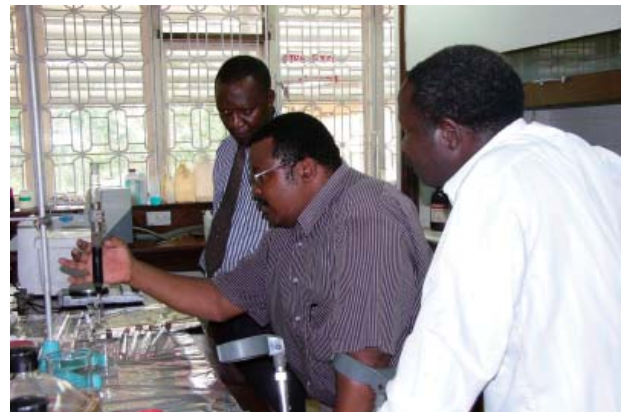
universities and seeks to improve their educational capabilities along with their ability to conduct and produce quality studies through facilitating exchanges among member universities.

The project offers 'Degree Awarding Programmes' by facilitating study in universities in Japan and participating countries, and supports joint research and academic seminars among universities of

ASEAN countries. These activities are expected to contribute to the enhancement of educational and research capacities of these universities as well as to the strengthening of academic networks among researchers in science and engineering fields both at individual and organizational levels. In the future, AICAD and SEED-Net are expected to join hands to spread the benefits of these projects throughout Africa.



Development of water-saving irrigation technology



Experiment in a laboratory at a Kenyan University

3-6: Strengthening Regional Transport Networks through Infrastructure Development: Cross-Border Corridor Development between Senegal-Mali, Tanzania-Kenya and in Mozambique

Japan is expanding its yen loan assistance through JBIC in collaboration with the African Development Bank via the Enhanced Private Sector Assistance for Africa (EPSA) program. Focus is placed on regional infrastructure projects, which the New Partnership for Africa's Development (NEPAD) promotes as an essential component for increasing linkages to external global markets.

The following three projects are examples of work which Japan has already initiated in an effort to link markets of inland and coastal countries and to enhance overall regional integration:

- ① Senegal (Dakar) – Mali (Bamako) road (960 million yen in 2006)
- ② Tanzania (Arusha) – Kenya (Nairobi) road (6.86

billion yen in 2006)

- ③ Mozambique (Montepuez – Lichinga) road (3.28 billion yen in 2006)

In addition to these projects, assistance is being planned for the Nacala Corridor linking Mozambique – Malawi – Zambia. As background to this project an on-site seminar was held on lessons learned from the Asian experience which are relative to the economic development of the Nacala port. Participants from Japan, Vietnam, and Mozambique attended. Moreover, moving beyond conventional road construction projects, Japan is planning the construction of roadside or vendor stations with the aim of simultaneously supporting community development along the corridor known as 'Michi-no-eki (Road-side Station)'.

Also, in Kenya, a 26.7 billion yen loan project was initiated in 2007 in order to expand the handling capacity of the Mombassa Port. This port serves as a gateway to the East African international highway, linking countries in the Great Lake region including Kenya, Uganda, Rwanda, Brundi, eastern Congo, and Southern Sudan.

In order to realise successful regional infrastructure projects in Africa, matching the initiatives of the NEPAD and the Regional Economic Communities (RECs) to each country's priorities is crucial. Moreover, Japan recognises the importance of strengthening the functions of RECs. Thus, JICA is now dispatching a specialist to the M&E Unit of the East Africa Community (EAC), with a view to strengthening ties between member nations and donors, as well as improving the co-ordination capacities of the member countries.

3-7:

Reduction of Inland Transport Costs: Support for the Development of a 'One Stop Border Post (OSBP)' on the Kenya-Tanzania Highway

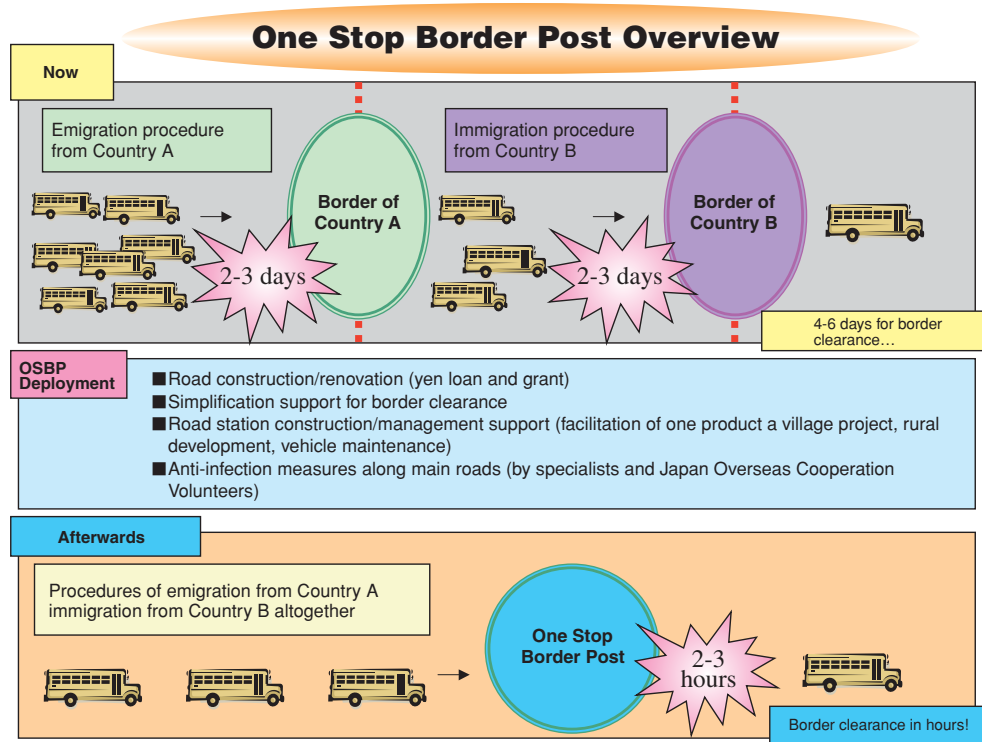
While transnational distribution over land is common in Africa, customs clearance is often unnecessarily time-consuming and complex. The complex customs clearance procedures required at the time of crossing borders are a chief obstacle to regional trade in Africa. As this problem can undermine the benefits of road network development, simplifying border clearance procedures is imperative for economic development in Africa.

Japan provides support in this area through the establishment of 'One Stop Border Posts (OSBP)' which are designed to standardise border crossing procedures, simplify customs clearance and to improve customs officials' capacities to handle their duties. JICA is assisting in the set up of an OSBP at the Namanga border between Kenya and Tanzania, where a partial road renovation project across the Arusha, Namanga and Athi rivers is taking place with the support from JBIC-EPISA.

Additionally, a bilateral agreement is being negotiated

for the establishment of an OSBP at the border of Zambia and Zimbabwe at the Chirundu Bridge, which was built with Japanese grant assistance, as well as a seminar being planned for setting up an OSBP at this site. This cooperation is expected to reduce the time it takes for border crossing and customs clearance procedures, which presently can take days, and hence the transport and distribution costs incurred, thereby contributing to overall economic development of the region.

There are other aspects of Japan's support in this field, which are making Japan's OSBP-related assistance more comprehensive. For example, Japan's OSBP assistance includes providing driving lessons for truck drivers and building workshops for vehicle maintenance to enhance safety. Moreover, education programmes for truck drivers for prevention of HIV/AIDS and other communicable diseases and support for the local community development are also incorporated into support activities.



3-8: Reinforcement of Regional Power Supply Capacity: National Electrification Programme in Zambia; Bujagali Interconnection Project in Uganda

In addition to enhancing transportation services, increasing the supply of electricity in Africa is yet another aspect of infrastructure development which is critical to the successful development and expansion of industries in Africa. Currently, hydropower is the core source of electrical power in Africa. However, unstable annual rainfalls have been exacerbating energy supply shortages; hence, it is crucial to develop stable power supply capacity in Africa by preparing regional power supply master plans, developing power generation and distribution facilities and strengthening operation and maintenance capacities, taking into account the direction and progress of the regional economic integration initiatives and international transport corridors.

Through supporting the development of two regional centres of reliable electric power supply in eastern and southern Africa, Japan is helping to pave the way for economic growth in Africa. Projects in

Zambia will provide an important energy resource for southern Africa, while the Bujagali hydropower project in Uganda, will increase the power supply in eastern Africa. Both serve as important foundations for developing regional power supply system and cross-regional power swapping system, which will contribute to the future economic development in these regions.

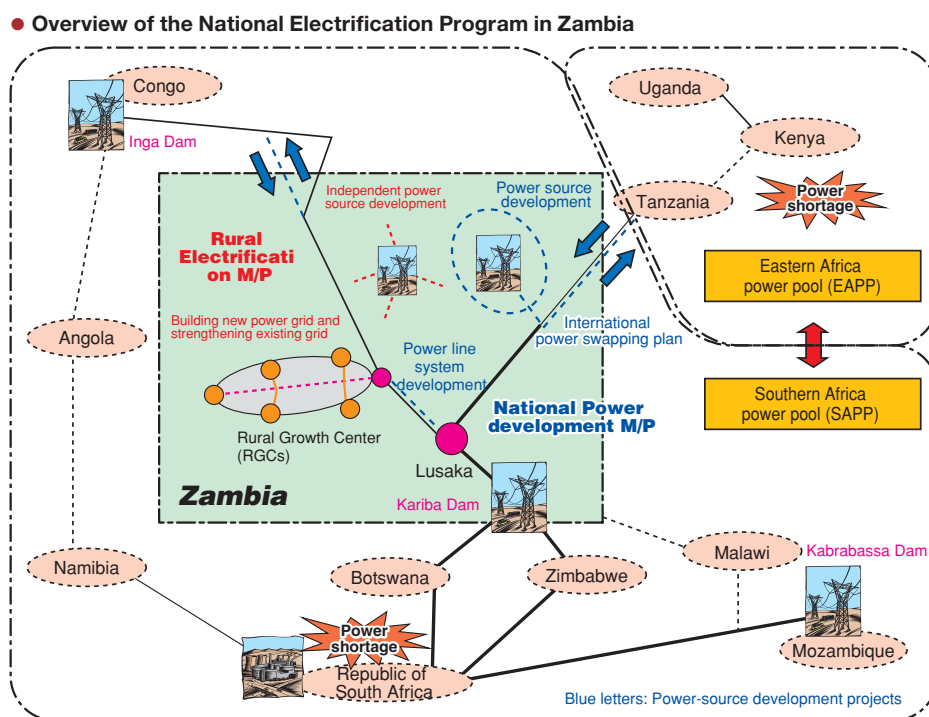
National Electrification Programme in Zambia

The national electrification programme in Zambia supported by JICA aims at boosting the country's position as a regional power supply hub in Southern Africa. The programme includes preparation of a master plan for the development of power generation facilities and transmission and grid systems for Zambia, and a plan for power swapping mechanisms with South Africa, Tanzania and Kenya, which

suffer from power shortages in recent years. The programme also has a rural electrification component, which consists of a master plan for power grid system development in rural areas and for rural power generation systems using mini-hydro and solar energy. The other aspect of the programme is a capacity building project for the government bodies in charge of power generation and distribution. This programme not only seeks to improve the power supply conditions in Zambia as a whole, but also aims to assist economic development in rural areas. The Asian experience of developing international power transmission systems in Mekong Basin Region spanning Lao PDR, Thailand and Vietnam will be utilized for this programme.

Bujagali interconnection project in Uganda

In 2007, JBIC began its support in the development of the Bujagali power grid system in Uganda in a 3.48-billion-yen joint financing initiative with the African Development Bank through ESPA. This project will install transmission lines and substations linked to the Bujagali hydroelectric power plant (250MW), which is one of Africa's largest private sector power projects, and is expected to provide power supply not only within Uganda but to neighbouring East African countries including Kenya. The Bujagali power plant will thus provide a power-supply system vital for economic and social development in Eastern Africa.



3-9

Support for a 'Green Revolution' in Africa: Comprehensive Africa Rice Development Initiative (CARDI)

Japan recognises the importance of a Green Revolution in Africa as being crucial to the overall economic development of the continent. As a means to realise the Green Revolution, with a special focus on rice, Japan will initiate the Comprehensive Africa

Rice Development Initiative (CARDI), in conjunction with the Alliance for a Green Revolution in Africa (AGRA) led by former UN Secretary of General Kofi Annan. This initiative is in line with and in support of other programmes, such as the Africa Rice Initiative

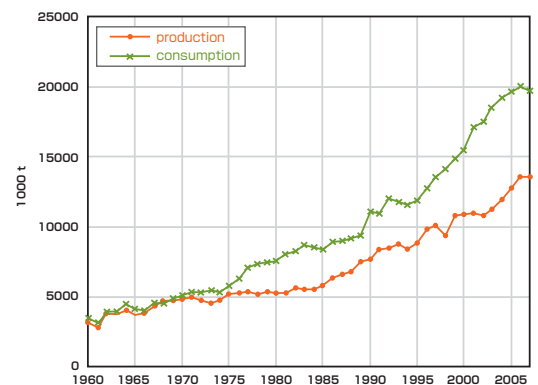
(ARI) led by WARDA and NEPAD's Comprehensive Africa Agriculture Development Program (CAADP).

Japan already has experience in improving land productivity of paddy to achieve food security and poverty reduction through its involvement in the Green Revolution in Asia during the 1960's-1980's. Drawing upon Japan's knowledge, as well as the lessons learned from other Asian countries will facilitate the success of the CARDI programme. CARDI supports the promotion of rice and aims to double the amount of rice production in Africa within 10 years (2008-2017). Moreover, it seeks to enhance each producer country's food security and raise incomes for small-scale farmers.

As part of this initiative, Japan will prepare and advance specific strategies for assistance depending on the cultivation environment (i.e. rain-fed upland farming, irrigated paddy farming or rain-fed paddy farming). Also, based upon the agricultural conditions of an area, Japan will promote the use of improved rice variety, including the one developed through the cross breeding of African and Asian rice varieties known as "NERICA" (New Rice for Africa), developed by

WARDA in hopes to improve rice productivity as well as expand land under cultivation. Other interventions include the development or rehabilitation of irrigation facilities and dissemination of appropriate cultivation technologies. Finally Japan will assist in improving extension services, access to agriculture credit, distribution system of agriculture inputs, and post-harvest processing, to enable enhanced access to improved cultivation technology and agriculture inputs.

● Rice production & consumption amounts in Africa



Data Sources: USDA: PS&D View November 2003; USBC: International Data Base, July 2003

3-10:

Promotion of Regional Co-operation in the Indian Ocean-Rim Region: Seminar on Trade and Investment Promotion in Indian Ocean-Rim Economic Region

Considering the close proximity of Indian Ocean countries with Africa, Japan through JICA has been promoting exchanges between these two areas through south-south cooperation in order to strengthen economic and social ties among these countries.

While relations between European and African countries have persisted for a long time, African countries are more and more expanding their interactions with Asian countries including China and India, which is prompted by the increasing presence of these countries in Africa. For African countries, especially those along the Indian Ocean, strengthening economic relations with countries throughout the pan-Indian Ocean region including South East Asia, South Asia and Middle East holds great potential for future economic growth.

In recognition of this potential, JICA has been offering a training program targeting the Indian Ocean-rim countries in Southeastern Africa such as Kenya, Tanzania, Mozambique, and Madagascar, to gain hands-on understandings on trade and investment conditions and policies of Japan and Southeast Asian countries. Through the exchanges with government officials and private business sector in Asian countries, there is an increased understanding on the side of the African participants of the complex dynamics of trade and investment in the region. Training participants are expected to use the knowledge and findings from the training to build their capacity for future decision making on trade and investment policy.